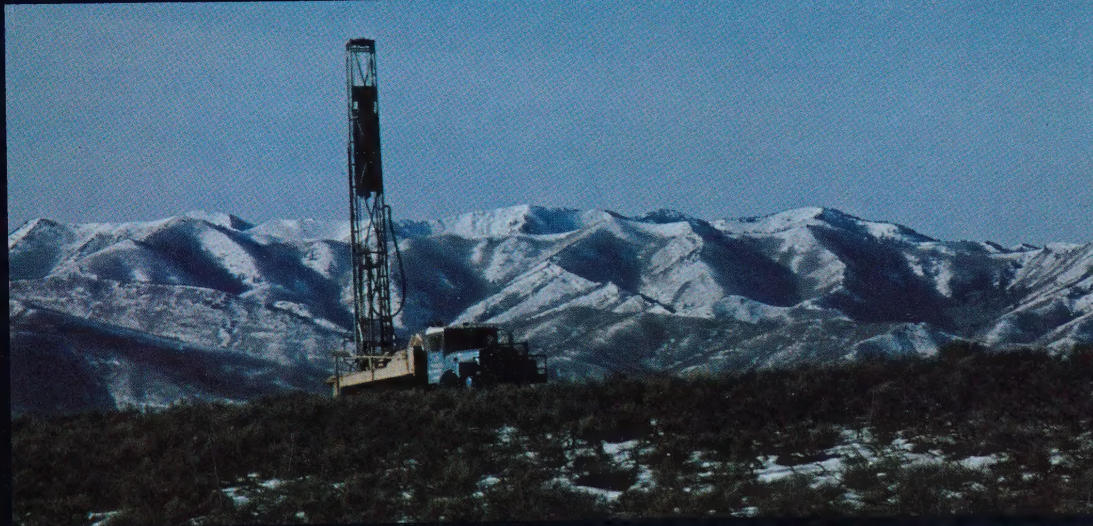




AR39

GULF OIL CORPORATION  
1977 ANNUAL REPORT  
AND FORM 10-K





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## Annual Meeting

The Annual Meeting of Shareholders will be held on April 25, 1978, in Soldiers and Sailors Memorial Hall, Pittsburgh, Pennsylvania. A formal notice of the meeting, proxy statement, form of proxy and request for admittance card will be sent to shareholders on or about March 23, 1978.

## Cover

Our front and back covers feature significant achievements of 1977. On the front cover (clockwise from left): expansion of the Clarkson refinery in Ontario; a seismic crew at work in Utah's Overthrust Belt; positioning a blowout preventer on the *Key Largo* drilling rig on East Cameron Block 330 in the Gulf of Mexico; and a modern station in the Galleria section of Houston. On the back cover: an ethylene tower rises through the pines at the new Cedar Bayou, Texas, plant; stockpiling the Company's first U.S. uranium at Mariano, New Mexico; headquarters of Kewanee Industries in Bryn Mawr, Pennsylvania, Gulf's newest subsidiary; a giant dragline removes overburden at the expanding McKinley coal mine in New Mexico; one of Gulf's 75 successful gas wells in the Webb-Zapata area of South Texas; and a view of the rudder and propeller of Gulf's new U.S. supertanker, the *American Independence*.

# THE YEAR IN BRIEF

## Financial Highlights

	Millions of Dollars		% Increase (Decrease)
	1977	1976	
Total Revenue .....	\$19,829	\$18,399	8
Operating Income			
United States .....	754	774	(3)
Worldwide .....	1,230	1,284	(4)
Net Income			
United States .....	460	494	(7)
Worldwide .....	752	816	(8)
Capital and Exploration Expenditures			
United States .....	2,209	1,125	96
Worldwide .....	3,013	1,742	73
Total Assets .....	14,225	13,449	6
Return on Average Shareholders' Equity .....	10.5%	12.2%	(14)
Return on Average Employed Capital	8.9%	10.4%	(14)

## Per-Share Data

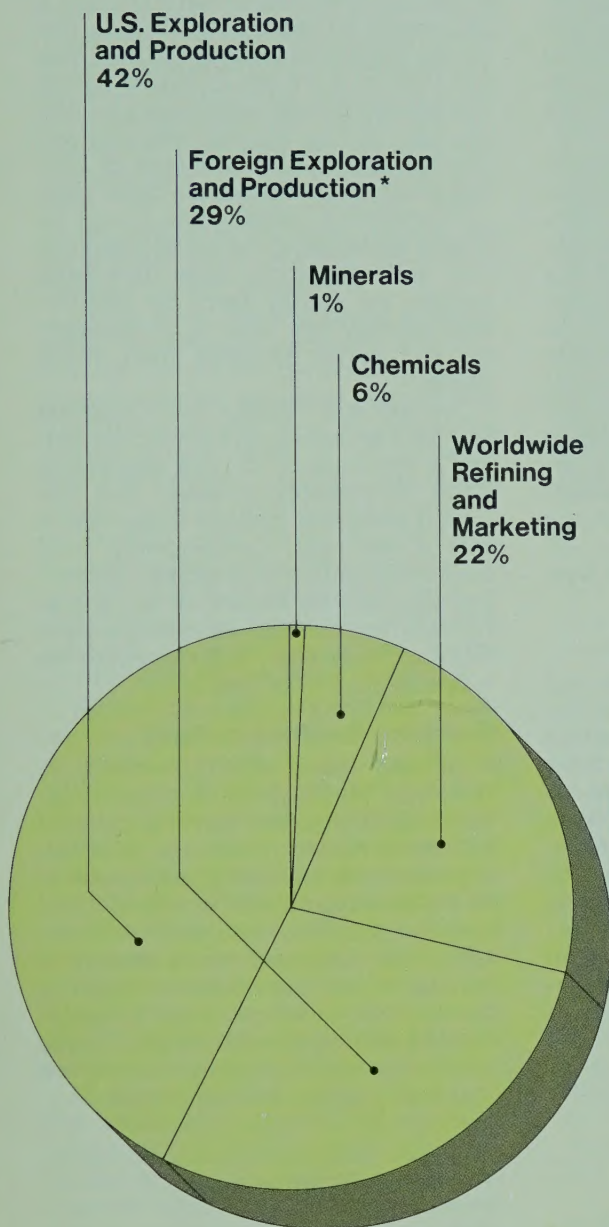
Net Income .....	\$ 3.86	\$ 4.19	(8)
Cash Dividends .....	1.85	1.73	7
Shareholders' Equity .....	37.63	35.62	6

## Operating Highlights

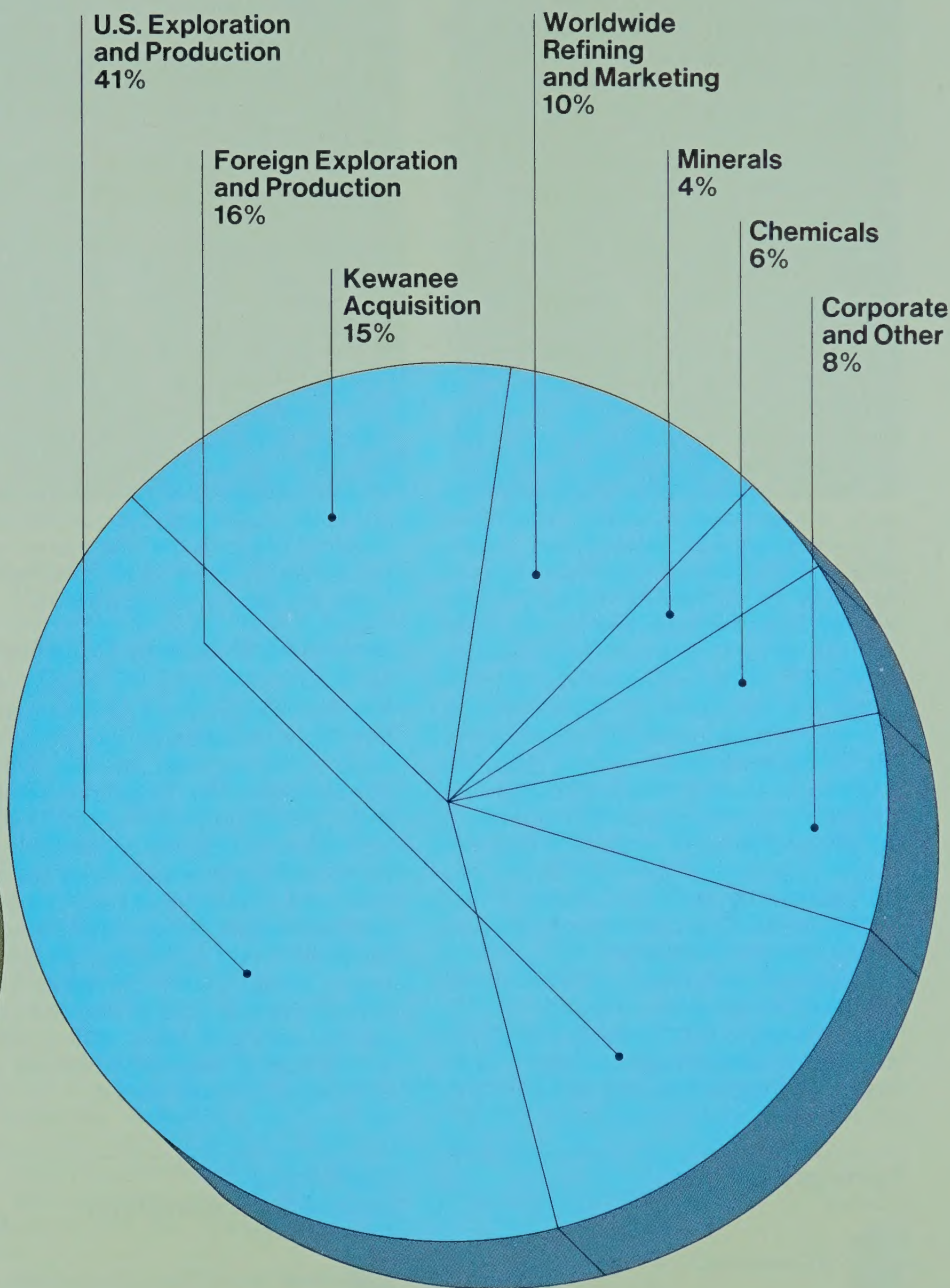
Net Crude Oil Produced, Including Participation and Long-Term Purchase Arrangements (daily average barrels)			
United States .....	336,300	337,700	—
Worldwide .....	1,611,200	1,730,300	(7)
Net Natural Gas Liquids Produced (daily average barrels)			
United States .....	65,900	60,800	8
Worldwide .....	76,000	70,600	8
Net Natural Gas Produced (thousand cubic feet per day)			
United States .....	1,864,900	1,712,500	9
Worldwide .....	2,166,700	2,035,100	6
Crude Oil Processed (daily average barrels)			
United States .....	840,300	814,600	3
Worldwide .....	1,765,500	1,696,600	4
Refined Products Sold (daily average barrels)			
United States .....	821,900	828,600	(1)
Worldwide .....	1,669,100	1,609,300	4
Chemicals Sold (millions of pounds)			
United States .....	6,490	5,710	14
Worldwide .....	10,820	9,930	9
Coal Mined (thousands of tons) .....	8,500	7,900	8
Uranium Produced (thousands of pounds) .....	2,630	1,900	38



**Operating Income**  
\$1,230,000,000



**Capital and Exploration Expenditures**  
\$3,013,000,000



\*Net of Foreign Taxes



# TO THE SHAREHOLDERS

While there were many achievements in 1977 which will contribute to Gulf's growth for years to come, two emotionally charged issues—national energy policy and a foreign uranium cartel—absorbed much of our time and the public's attention.

With the rest of the nation, Gulf is vitally interested in the unfolding debate on energy policy, and we are disappointed that a comprehensive and economically sound energy plan has not been enacted. As an early and consistent supporter of the President's energy goals, we participated actively and constructively in efforts to shape those goals into legislation by testifying at Congressional hearings, appearing before town hall meetings, and briefing individual members of Congress and the Administration whenever our views were sought.

Through numerous speeches to civic and professional groups, interviews and meetings with newspapers, magazine and network editors, we spoke out in favor of measures to encourage energy conservation and to promote the use of coal, uranium and nonconventional energy sources. We emphasized the necessity of increasing oil and gas supplies and the importance of higher prices in reaching that goal. We supported market forces as preferable to government regulations in balancing supply and demand. And we urged that those regulations deemed necessary be reasonable and consistent so that energy planning and investments could be made with confidence.

For years, this letter has chronicled the nation's growing dependence on imported oil. In 1977, nearly half of the petroleum consumed in the United States was imported, and at 8.7 million

barrels per day, these imports were nearly equivalent to Saudi Arabia's total production. Although world oil supplies are currently in surplus, the oil embargo of 1973 cannot be forgotten. Moreover, foreign oil cost the U.S. \$44 billion last year, contributing to the largest trade deficit in the nation's history and a corresponding decline in the value of the dollar.

The sensible solution would be to phase out price controls on oil and gas in order to stimulate exploration while dampening demand. Instead, U.S. government policy continues to do the opposite. Consumption is encouraged by holding crude oil prices below the world level, natural gas prices below that of crude on a heat-equivalent basis, and the price of both below their replacement cost. Meanwhile, production of all energy is discouraged by layer upon layer of regulations, and reasonable profits are denounced on the illogical premise that the nation is better served if there is no success than if the successful are rewarded.

## Investment Philosophy Explained

Until now, believing that reason would eventually prevail, we have focused our efforts on those areas that parallel our view of the national interest. We have concentrated on petroleum development, particularly in the U.S., we have increased our coal and uranium operations, and we have expanded our chemicals and plastics business to upgrade our feedstocks. Since our strategy has assumed that, ultimately, government policy would permit us rewards commensurate with our risks and investments, we have been willing to take advantage of the opportunities available in our chosen fields.

Over the past five years, Gulf has spent \$9 billion on capital and exploration projects, with two-thirds of the funds invested in the U.S. Last year alone, we spent more than \$3 billion, a 73-percent increase over 1976, in one of the largest investment efforts ever put forth by a private company. Given the inherently long lead times required for major energy projects, this program represented as strong a vote of confidence in the nation as we could give.

Furthermore, while some in our industry, anticipating the worst in legislation and regulation, have diversified outside the energy field, our acquisition strategy has been a complement to, and not a deviation from, these goals.

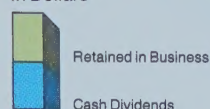
We are still hopeful that Congress will pass an energy bill which will permit a continuation of this aggressive effort. Regrettably, however, the outlook is even less hopeful today than it was a year ago. Consequently, until sound legislation is enacted, prudent management on behalf of our shareholders requires that we maintain flexibility and discretion with respect to the future allocation of capital.

## Examining the Uranium Cartel

A second issue which concerns us deeply is the litigation and investigative proceedings surrounding the brief existence several years ago of a foreign uranium marketing arrangement. As the average price of uranium tripled over the past few years and spot market prices rose even more sharply, a number of companies have sought to break their uranium supply agreements and have used the "cartel" issue as an excuse. Gulf does not believe that their position is supportable.

## Earnings Per Share

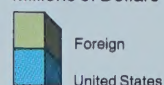
In Dollars



6.00

## Capital and Exploration Expenditures

Millions of Dollars



4000

## Return on Investment

Percent Return



20

4.50

3000

15

3.00

2000

10

1.50

1000

5

0

0

0

1973 1974 1975 1976 1977

1973 1974 1975 1976 1977

1973 1974 1975 1976 1977



In 1972, Gulf Minerals Canada Limited, one of our subsidiary companies, was directed by the Canadian government to join with other Canadian and world uranium producers in marketing meetings. The Canadian initiative was in response to actions by the U.S. government in excluding foreign uranium from the growing U.S. market. Participation by Gulf Minerals Canada was not voluntary and was undertaken only after the Company obtained assurances from qualified legal counsel that no antitrust laws—in either the U.S. or Canada—would be violated.

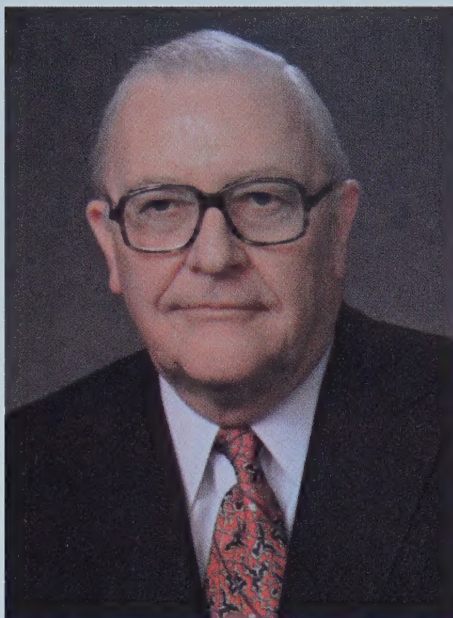
By its terms, the marketing arrangement specifically excluded the U.S. market. During the period in question, foreign prices generally lagged behind those quoted by U.S. producers. Simply stated, there is no evidence that the “cartel” had any identifiable impact on U.S. commerce. Last year, production from Gulf’s Rabbit Lake, Saskatchewan, mine was delivered to foreign utilities at an average price of \$16 a pound, far below the \$42-to-\$45-a-pound price widely quoted as the current spot market price in the U.S.

Independent analysts and market observers attribute the general increase in uranium prices to factors having nothing to do with the foreign marketing arrangement. Among them: changes in U.S. government uranium policy; the increased cost of uranium mining; the OPEC oil price increases of 1973-74; actions by the governments of Australia, France and South Africa to either cut back uranium production or withdraw from the export market; TVA’s request for bids in late 1973 for an incredibly large amount of uranium—86 million pounds—at one time; and the short-sale activities of Westinghouse Electric in committing to utilities approximately 65 million pounds of uranium which it didn’t own, and then declaring that it wouldn’t honor those contracts.

While Gulf is involved in a number of lawsuits and investigations involving the cartel issue (discussed in detail in Notes 6 and 16 to the financial statements), we are convinced that our position is sound and that it will be judged so after any fair and objective review of the facts.

#### Progress and Problems of 1977

In the pages which follow, we explain in detail the progress and problems of the past year. Despite a number of significant operating achievements, earnings fell short of expectations and declined by nearly eight percent to \$752 million, or \$3.86 per share. Re-



Jerry McAfee

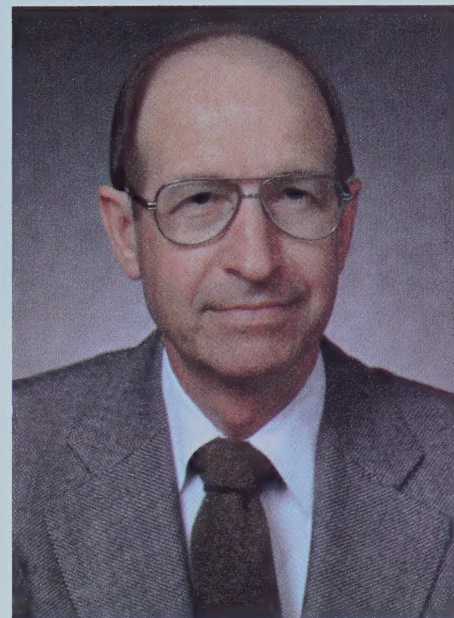
turns on average shareholders’ equity and average employed capital fell to 10.5 percent and 8.9 percent, respectively, from 12.2 percent and 10.4 percent in 1976. This performance is clearly unsatisfactory in light of our past investment and future capital requirements.

Nevertheless, in expressing their confidence in Gulf’s future, our directors increased the quarterly dividend for the fourth time in as many years—to an annual rate of \$1.90 per share. Last year’s cash dividend was seven percent above that of 1976 and 23 percent higher than in 1973.

In other noteworthy accomplishments:

- We completed our first major acquisition in a decade with the purchase of Kewanee Industries, Inc., which strengthens both our U.S. petroleum and specialty chemicals operations.
- We increased our U.S. natural gas production for the first time in five years.
- We substantially expanded our exploratory acreage in the Gulf of Mexico, on shore in the lower 48 states, in Canada and around the world.
- We produced the Company’s first U.S. uranium and christened two of the largest U.S. flag tankers ever built.

All of this was accomplished while maintaining a strong financial position. Gulf’s record capital program of 1977 was essentially financed from internally generated funds. Although cash and marketable securities were drawn down by \$825 million, these still totaled \$1.16 billion at year-end. Long-term debt at year-end of \$1.31 billion gave Gulf a debt-to-capitalization ratio of only 15 percent.

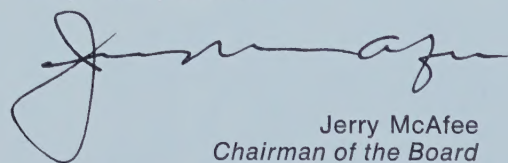


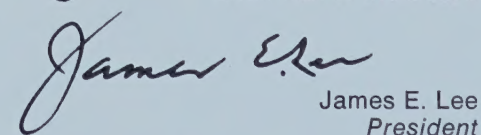
James E. Lee

To help assure a continuation of this progress, we broadened the shoulders of our top management group in January 1978 through the creation of a four-member Corporate Senior Executive. In addition to the two of us, it includes Harold H. Hammer, Executive Vice President and Chief Financial Officer, and Edward B. Walker, III, Executive Vice President and formerly President of Gulf Energy & Minerals Company, our worldwide producing arm.

We continue to view Gulf as a corporation on course, with the physical, human and financial resources necessary to meet the challenges which lie ahead. We thank our employees, shareholders, dealers and customers for their loyal support over the past year and we look forward to further growth for the benefit of all who share in our efforts.

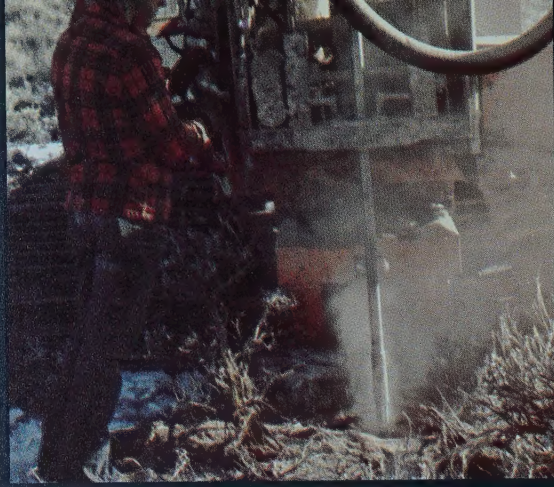
Respectfully submitted,

  
Jerry McAfee  
Chairman of the Board

  
James E. Lee  
President

February 28, 1978







# EXPLORATION & PRODUCTION

## UNITED STATES

For Gulf Oil Exploration and Production Company, 1977 was a year of progress and a year of promise. In the United States, the Company:

- Achieved an 8.9-percent increase in natural gas production, reversing a steep decline which began in 1972.
- Acquired 12 prime tracts in the Gulf of Mexico for a record \$314 million, and then confirmed its bidding optimism with three early discoveries.
- Discovered and put into production one of the Company's most significant new onshore oil plays in recent years in the Williston Basin of North Dakota.
- Expanded both its producing and exploratory properties primarily through the acquisition of Kewanee Industries, Inc.

Along with these successes, however, were a few disappointments. The Company's goal of reversing a seven-year decline in crude oil production was not quite reached, although at less than one percent, the decline was the smallest in many years. The Kewanee acquisition should enable the Company to post a modest increase in production in 1978.

With the rest of the industry, the Company also was unsuccessful in its initial frontier exploration efforts in the Gulf of Alaska and offshore Southern California. Gulf alone paid some \$58 million in lease bonus payments in these two areas in 1975 and 1976, and spent another \$17 million in drilling and exploration work before activity was halted. This experience illustrates anew that despite years of expertise and the development of highly sophisticated equipment and technology, the search for oil and gas is characterized by increasingly high risks and high costs.

Gulf's U.S. crude oil, natural gas and gas liquids production in 1977 generated operating earnings of \$514 million, essentially unchanged from 1976.

### \$1.24 Billion Spent for New Oil and Gas

During 1977, Gulf spent a record \$1.24 billion for the acquisition, exploration and development of oil and natural gas properties in the U.S., representing 41 percent of the Company's total capital and exploration spending. This was 67

percent higher than the \$744 million spent on domestic petroleum projects in 1976. Wildcat drilling and other exploratory activities required \$272 million in 1977, compared with \$204 million a year earlier. The Company's successful bids of \$314 million on 12 Gulf of Mexico tracts in the June federal lease sale compared with \$139 million spent on 17 leases in two frontier offshore areas and the Gulf of Mexico in 1976.

For the sixth year in a row, the Company substantially increased its inventory of onshore exploratory acreage. At year-end this reached 13.1 million net acres compared with 10.5 million at the end of 1976. This acreage includes locations in Michigan, Tennessee and New York, as well as in more traditional exploratory areas. The acquisition of Kewanee strengthened Gulf's position in the Rocky Mountain area, in Southwest Texas and in Oklahoma.

Gulf averaged 25 seismic crews in the field each month during 1977, accounting for eight percent of all such activity in the U.S.

Drilling activity continued at an intensified level, approximately twice the pace of five years ago, with the Company participating in 175 new field or new pool wildcats, 48 of which were successful—20 as oil wells and 28 as gas. In addition, Gulf had an interest in 1,282 development wells, of which 1,171, or 91 percent, were successful.

To help maintain this pace, Gulf launched the industry's first training school for rig operations with courses ranging from four weeks to four years being offered to geophysicists, land agents, accountants, attorneys, geologists, production and drilling engineers and rig supervisors.

All of this was directed at offsetting, or reversing, the natural decline in Gulf's mature producing areas. Even with workovers, infill drilling and continued exploration around these fields, the Company must add up to 30,000 barrels or so per day in new production each year. Today, some 35 percent of Gulf's crude production is being stimulated through waterflooding of the reservoirs or other secondary recovery methods.

In addition, Gulf participated in 28 enhanced recovery projects, 19 of them Company-operated, during 1977 with net production of 3,300 barrels per day at year-end. Five field tests involving caustic, steam and emulsion flooding were initiated last year and three more are planned in 1978.

## Kewanee Adds Production, Reserves

With severe winter weather in the first quarter of 1977 and two hurricane threats during the summer, which forced the Company to temporarily curtail operations in the Gulf of Mexico, crude production slipped to 336,300 barrels per day from 337,700 barrels per day in 1976. However, production of natural gas liquids increased to 65,900 barrels per day from 60,800. Thus, total liquids production averaged 402,200 barrels per day, up slightly from a year earlier.

Natural gas production rose significantly during 1977 to 1.86 billion cubic feet per day from 1.71 billion in 1976.

Kewanee volume was included only during the fourth quarter of 1977, when its daily production was 18,500 barrels of crude oil and 56 million cubic feet of natural gas.

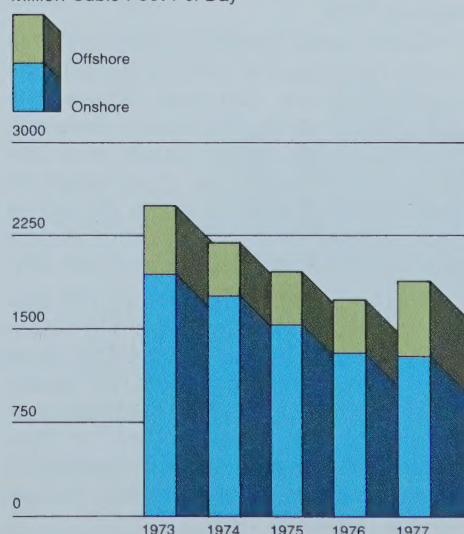
With the Kewanee acquisition, Gulf's net proved reserves of crude oil rose three percent during 1977 to 1.03 billion barrels at year-end, and natural gas reserves rose three percent to 6.4 trillion cubic feet. A further discussion of reserve calculations is included on page 57.

## Gulf of Mexico Development Advances

Most of the increase in natural gas production came from the Gulf of Mexico, where the Company has spent \$1.9 billion over the past six years to acquire and develop properties. Eight platforms and more than 100 miles of new pipeline were installed in 1977. Three new fields were brought on production last year, bringing to nine the number of new fields connected in the Gulf of Mexico since December 1974. At year-end these fields were produc-

## U.S. Natural Gas Production

Million Cubic Feet Per Day



(Clockwise from left): an oil rig pierces the horizon in the Little Knife field of North Dakota's Williston Basin; core drilling in the Hartzog Draw area of Wyoming; frontier drilling by the Aleutian Key in the Gulf of Alaska; and drilling, supply and crew platforms for the Thistle field, North Sea.



ing 17,850 barrels of oil and 335 million cubic feet of gas per day.

Rising natural gas volume allowed Gulf to substantially increase its deliveries of gas to Texas Eastern Transmission Corporation. Deliveries averaged 592 million cubic feet per day in 1977 compared with 362 million in 1976. By year-end 1977, the Company had delivered 2.2 trillion cubic feet of natural gas, or half of the total promised, to Texas Eastern under its 1964 fixed-price contract. While the current contract price of 21 cents per thousand cubic feet is an economic burden to the Company, Gulf should have substantial gas reserves in place on fulfillment of the contract which can then be sold at higher market rates.

During the bitterly cold months of early 1977, the petroleum industry was subjected to much criticism for allegedly withholding needed gas supplies. In Gulf's case, those charges were unwarranted. The Company's dedication to the rapid development of its properties was illustrated in January 1977 when South Timbalier Block 163, 40 miles offshore Louisiana, was brought into production in just 20 months after the lease was acquired. It is now delivering 75 million cubic feet of gas a day. A four-to-five-year offshore development schedule is more typical.

This same emphasis is being placed on the early evaluation and development of the Gulf of Mexico leases acquired last June. By year-end, three gas discoveries involving four of the 12 tracts had been made and three production platforms ordered for installation in 1978. The first wildcat well, testing adjoining Blocks A517 and A498 in the High Island area offshore Texas, logged 158 feet of net gas pay in six reservoirs. Additional gas discoveries were made on Vermilion Blocks 24 and 260 offshore Louisiana. The Company hopes to bring one of these fields, as well as eight others in the Gulf of Mexico, into production during 1978.

Gulf's other offshore production is in the Dos Cuadras field in California's Santa Barbara Channel, where the Company has a 25-percent interest. After years of legal delays over environmental issues, a third platform was installed and 21 wells drilled in 1977. At year-end, Gulf's share of production averaged 4,300 barrels per day.

Similar litigation concerning the Baltimore Canyon, offshore the mid-Atlantic Seaboard, prevented the Company from drilling on any of its 10 leases there in 1977. However, a favorable ruling by the U.S. Supreme Court in February 1978 will now allow evaluation of these holdings. Gulf paid \$39 million for the leases in 1976.

## **Oil Discovered in North Dakota**

In February 1977, Gulf made a major discovery in the Little Knife field of the Williston Basin of North Dakota. By year-end, Gulf had 28 producing wells and five drilling rigs working. Net production was restricted to 3,300 barrels per day pending completion of a gas desulfurization plant in 1978 which will allow daily output to increase to 10,000 barrels.

The Company continued a leading role in the development of the Webb-Zapata area of South Texas, one of the most active onshore gas plays in the country. Gulf has an interest in 139,000 acres, or approximately 30 percent of the area under lease. A total of 75 successful wells has been drilled on Gulf-operated acreage, and the Company holds an interest in 68 additional wells. Gulf drilled 43 new wells in 1977, and it's expected that an equal number will be drilled this year. Year-end production was 80 million cubic feet per day compared with 60 million cubic feet at the end of 1976.

## **Petroleum Prices Artificially Set**

Are significant oil and gas deposits yet to be found in the U.S.? What price level provides an adequate return to enable the industry to continue its search for new reserves? Is the government capable of determining this "adequate" price, or should that be left to the competitive market? Over the longer term, will controls and regulations produce more energy at less cost, or will the opposite be true? These, in essence, were the central questions of the great energy price debate of 1977.

While headlines, and those who sought them, spoke of oil at \$14 a barrel and natural gas at \$2 or more per thousand cubic feet, those references were to possible future prices on possible future production. Current revenue, which must finance the search for new discoveries, remained controlled at much lower levels.

Gulf received an average \$8.09 a barrel for its U.S. crude oil production during 1977, while natural gas realizations were 56 cents per thousand cubic feet. These compared with prices of \$7.39 per barrel and 45 cents per thousand cubic feet in 1976.

The net effect of the Energy Policy and Conservation Act of 1975, and its interpretation by the new Department of Energy (DOE), has been to hold U.S. crude prices unrealistically low. Previously promised price increases have

Other promising areas for Gulf include the Hartzog Draw area of Wyoming, where the Company has an interest in 16 wells and net production averaged 2,600 barrels per day in 1977 and the Overthrust Belt of Wyoming, Utah and Idaho, where Gulf has 700,000 net acres and an active wildcat drilling program under way.

## **Gas Liquids Growth Significant**

Gulf's sales of natural gas liquids, principally conducted by Warren Petroleum Company, increased 22 percent during 1977 to 123,200 barrels per day. Four new processing plants were authorized, and at year-end, Warren operated 34 gas processing plants and had an equity interest in 34 others.

Expansion of Warren's import complex on the Houston Ship Channel should be completed in mid-1978. This facility will accommodate gas liquid tankers of up to 80,000-cubic-meter capacity and have an unloading capability of 15,000 barrels per hour.

been denied, the price of production from older fields was frozen during most of 1977 and the price of newly found oil was rolled back twice. At year-end, prices for "lower-tier" oil from properties developed prior to 1972 had been allowed to increase only five percent from their December 1973 levels to \$5.28 a barrel, and new, or "upper-tier," production had increased only 11 percent to \$11.80 a barrel. Over the same period, the cost of drilling and producing oil had increased more than 90 percent.

Under DOE definitions, 42 percent of Gulf's 1977 crude oil production was classified as upper-tier oil and stripper oil from low producing wells. This represented an improvement over 1976, when only 31 percent of Gulf's crude mix was entitled to these higher price levels.

Industrywide natural gas realizations increased as a result of a 1976 Federal Power Commission ruling setting new price tiers for interstate sales from post-1972 discoveries. At year-end, less than six percent of Gulf's gas sales qualified for the highest interstate base rate of \$1.47 per thousand cubic feet, and 62 percent sold at rates of 37 cents or less per thousand cubic feet. Approximately 27 percent of Gulf's natural gas was produced and sold within the same state and therefore was not subject to federal price controls.



## INTERNATIONAL

Abroad, there was greater recognition by oil producing and potential oil producing nations of the role to be performed by the international oil companies—and a corresponding reaffirmation by Gulf that the Company intends to remain a major force in the worldwide production of petroleum.

Gulf participated in the drilling of 47 wells overseas in 1977, of which 23 were in West Africa, 17 in the North Sea, 4 in Asia and 1 each in Italy, Oman and Tunisia. Of the total, 21, or 45 percent, were successful. Overall, capital and exploration expenditures increased to \$179 million in 1977 from \$143 million a year earlier.

Crude oil production from equity, participation and long-term purchase agreements during 1977 totaled 1.2 million barrels per day from eight countries outside North America, compared with 1.3 million barrels daily in 1976. The decline resulted primarily from a world crude surplus in 1977 which reduced demand for certain high-sulfur Middle East crudes and from the Company's withdrawal from Ecuador at the end of 1976. Production increased in Angola, where internal hostilities had caused a suspension in operations during the first four months of 1976. A country-by-country tabulation of production is shown on page 46.

### North Sea Production Begins

After more than 12 years of activity in the North Sea and \$300 million in expenditures, Gulf recorded its first production in February 1978, when oil began to flow from the Thistle field. Gulf has only a 1.2-percent interest in this field, but its share of production should reach 1,500 barrels per day during the year.

The Thistle is the first of four fields in the Brent Cluster some 100 miles northeast of the Shetland Islands being developed by Gulf and its partners. A second field, the Dunlin, will come on production this spring with the Company's 12-percent share initially yielding 4,800 barrels of oil per day. Production from both fields will at first be barged to shore, but after 1978 will be pumped through the Brent pipeline to Sullom Voe, Scotland, where the largest crude oil storage complex in Europe is being constructed.

Development work proceeded during 1977 on the giant Statfjord field, where three platforms costing \$3 billion are being readied, and on the Murchison field, which will utilize the largest single piece steel platform ever constructed. Gulf has a 3.7-percent and 25-percent interest, respectively, in these two fields, which will come on production in 1979 and 1980.

Production from all four fields should peak at about one million barrels per day in 1983, with Gulf's share being about 70,000 barrels per day. Gulf also expects to participate in additional fields that should bring its net production to close to 100,000 barrels per day. To date, the Company has shared in several discoveries in the United Kingdom sector of the North Sea that require further drilling and analysis to determine if they can be commercially developed. One of these is the Hutton field located just south of the four major fields.

Gulf and its partners, Continental Oil Company and the British National Oil Corporation, acquired an additional block in the U.K. sector in the fifth round of leasing last year. An active wildcat program will continue in the U.K. sector in 1978. In addition, the Company farmed into two blocks held by others in the Norway sector and will be the operator, initially earning a 25.4-percent interest by exploratory drilling.

### West African Importance Grows

West Africa is Gulf's most important foreign producing area outside North America.

Nigeria, where Gulf is that nation's second largest oil producer, is a prime example of the improving business climate Gulf believes is emerging throughout the world. The Company and the government have agreed to a series of improved financial and tax incentives designed to encourage new investments and thus further the development of promising, but presently nonproductive, areas of the country.

In Angola, negotiations are well advanced toward finalizing a new participation agreement giving the govern-

ment a majority interest in operations. The agreement is expected to be signed in early 1978.

To prolong production levels in Zaire, a \$25-million waterflood project was initiated in 1977 with start-up scheduled for mid-1978. In Cameroon, Gulf acquired a 50-percent interest in a 468-square-mile exploration tract bordering Nigeria, and a 60-percent interest in a 2,500-square-mile tract near the Atlantic Coast.

Elsewhere, Gulf:

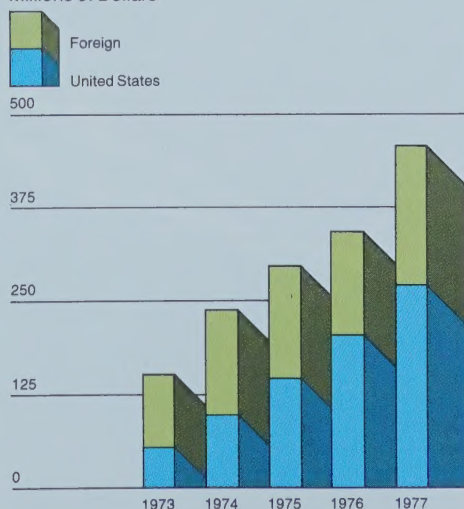
- Initiated seismic operations on two large blocks on the Sinai Peninsula in Egypt acquired late in 1976.
- Upgraded the quality of its holdings in Indonesia.
- Acquired an interest in a very large deepwater block offshore Western Australia.
- Participated as a minority shareholder in a new field discovery off the Pacific Coast of Russia's Sakhalin Island.
- Pioneered with the World Bank in devising a financing plan for a petroleum development project in Pakistan for which negotiations are still under way.

Gulf's technical assistance and crude and product purchasing agreements with the government of Venezuela were extended for two years through 1979. In May, Gulf received provisional payment from the government of Ecuador for the 1976 purchase of Gulf's producing and pipeline interests.

During 1977, Keydril, Gulf's international offshore drilling contractor, doubled to six the number of its rigs in operation. A seventh rig, now under construction, is scheduled for delivery in June 1978.

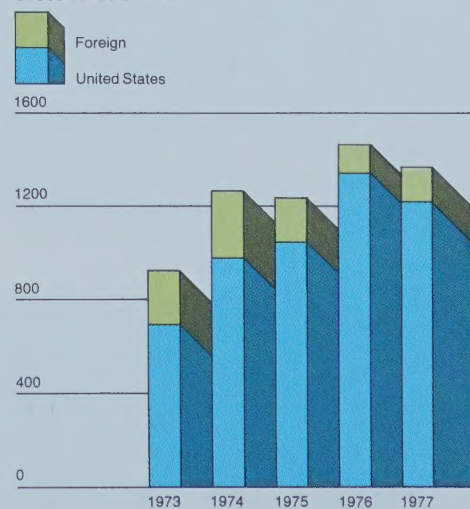
### Petroleum Exploration and Dry Hole Expenses

Millions of Dollars



### Successful Oil and Gas Wells Drilled Worldwide

Gross Wells Drilled









# TRADING & TRANSPORTATION

Gulf Trading and Transportation Company became the leading United States flag tanker operator in 1977 in terms of tonnage with the commissioning of the AMERICAN SPIRIT and the AMERICAN INDEPENDENCE. These two 265,000-deadweight-ton ships, capable of carrying two million barrels of crude oil each, are among the largest ships to fly the U.S. flag.

Delivery coincided with a strengthening U.S. tanker market created by Alaskan oil movements and the government's Strategic Petroleum Reserve Program. Damage to the Alaskan pipeline delayed some shipments of Alaskan crude in 1977, but both Gulf vessels began service in this trade in early 1978.

Including these two new Very Large Crude Carriers, Gulf's U.S. flag fleet is comprised of 16 owned vessels with a total of 932,000 deadweight tons. Gulf's foreign flag fleet, which is registered under nine flags, consists of 39 owned vessels and 21 on long-term charter. These ships totaled 7,890,000 deadweight tons, equal to about three percent of the world fleet.

During 1977, the Company purchased five foreign flag ships in the 90,000-to-128,000-deadweight-ton class for service to its U.S. refineries.

The world tanker market continued to be depressed during 1977, with about 27 percent of the world fleet in surplus. Throughout this period of excess tonnage, which began in 1975, Gulf's fleet has remained in balance.

To take advantage of the decline in tanker rates, Gulf increased its dependence on the spot charter market during 1977 to nine percent of its foreign marine transportation requirements from five percent in 1976. Gulf's owned and controlled foreign flag fleet carried 285 billion loaded ton miles of crude oil during 1977 compared with 339 billion ton miles in 1976. In addition, to conserve fuel, the Company operated its vessels at slower than normal speeds on the ballast leg of the trip.

## Crude Portfolio Expands

In its role as an international buyer, seller and transporter of crude oil, Gulf has greatly expanded its crude portfolio in recent years. In 1977, the Company handled 43 different types of

foreign crude for a total volume of two million barrels per day, compared with 18 crude types representing the same volume in 1972. While posing more complex logistical problems, this expansion of crude types has given Gulf greater flexibility in meeting its downstream requirements while reducing its reliance on one or two large suppliers. The Company also is better able to dispose of Gulf-produced crudes not suited to the Gulf system.

Gulf also has increased its international marketing of a number of petroleum products, such as petroleum coke; jet fuel; marine fuels; marine, automotive and industrial lubricants; and gas liquids. These products come from the Gulf refining system and from outside sources, and they are marketed in 132 countries throughout the world.

Construction began in 1977 in Lake Charles, Louisiana, on a new plant capable of calcining 400,000 tons of petroleum coke per year. This plant is expected to come onstream in late 1978 and will upgrade Gulf's petroleum coke into calcined coke, which is used by the aluminum industry.

## World Crude Surplus Develops

A worldwide surplus of crude oil developed in 1977 as:

- the rate of growth of petroleum demand decreased in response to the sluggish economies of much of the industrialized world,
- Saudi Arabia—the key to the Organization of Petroleum Exporting Countries' overall strategy—increased its production to an average of 9.2 million barrels per day in order to moderate OPEC price increases during the first half of 1977,
- new crude supply from non-OPEC sources such as Mexico, Alaska and the North Sea added more than two million barrels a day during 1977 with some eight million expected by 1982.

The world crude surplus is expected to continue possibly through 1985. The 1978 surplus—defined as the difference between demand and the target production levels of the producing countries—is estimated at up to 3.5 million barrels per day with two-thirds being sour or high-sulfur crude, principally from the Arabian Gulf and Venezuela, and one-third sweet crude, mostly from North and West Africa. This doesn't include the excess productive ca-

## Number of Tankers Owned, Leased and Long-Term Chartered

	1977	1976
Deadweight Tons		
Up to 50,000 . . . . .	29	33
50,001 to 130,000 . . .	27	25
130,001 to 250,000 . .	4	4
Over 250,000 . . . . .	16	14
	<u>76</u>	<u>76</u>
Thousands of		
Deadweight Tons		
Owned and Leased . .	5,755	4,783
Long-Term Chartered	<u>3,067</u>	<u>3,385</u>
	<u>8,822</u>	<u>8,168</u>

To capitalize on its marine expertise, Gulf in 1976 became a 75-percent partner with Hansa Line of West Germany in the American Heavy Lift Shipping Company. This company is building two 3,000-ton vessels capable of handling, with their own equipment, single cargo items weighing up to 1,000 tons each. These ships will be launched in the fall of 1978 and spring of 1979 and will be the first heavy lift vessels to fly the U.S. flag.

capacity of the producing countries, which for Saudi Arabia alone is four million barrels per day.

As a consequence, the OPEC oil ministers, who have determined the world price for oil since 1973, declined to raise prices at their December meeting in Venezuela. The three major African sweet crude producers—Algeria, Libya and Nigeria—dropped their price at year-end as much as 30 cents a barrel, and Kuwait reduced its price by 10 cents per barrel in January 1978. While this moderation in prices is encouraging, it must be viewed in the context of imports with a landed cost in the U.S. today of about \$15.50 a barrel.

As an operator in foreign producing countries, Gulf has reminded those governments of the market realities which must be faced during a time of surplus. As a worldwide refiner of petroleum products, the Company has sought to take advantage of a buyer's market. And as an international crude trader, Gulf is working closely with as many producing countries as possible to try to balance the supply-demand equation. However, any prolonged surplus could have serious implications for the entire petroleum industry.

*(Clockwise from left): the Bay Skimmer, an oil-spill recovery vessel, goes through its paces in Bantry Bay, Ireland; a Sabena jet-liner in Brussels, Belgium takes on jet fuel; and the American Spirit, one of two U.S. flag supertankers commissioned last year.*







# REFINING & MARKETING

## UNITED STATES

Gulf Refining and Marketing Company enhanced its position as a significant contributor to Corporate profits in 1977. In the United States, operating earnings of \$208 million increased 18 percent over the \$176 million earned in 1976. The significance of these figures is underscored by the fact that as recently as 1975 these operations barely broke even.

Since the early 1970s, when Gulf began implementing a downstream strategy based on profitability rather than volume, marginal outlets have been closed and operations concentrated in areas of competitive strength. As a result, identifiable assets have been reduced by about a third to \$1.7 billion, the number of retail outlets cut by 40 percent to 18,300 at year-end, and the original 45 marketing districts consolidated into 16 with a significant savings in operating costs. With an increase in volume over the period, productivity per employee has improved considerably.

New construction and station modifications have emphasized high-volume, Company-operated, self-serve locations and unbranded outlets, particularly in the large metropolitan areas of the southeast and southcentral states. While meeting growing consumer preference for lower prices, Gulf also has sought to support its full-service, dealer-operated network through its first brand recognition advertising program in four years.

### Houston, Atlanta Lift Market Share

Gulf increased its share of the retail gasoline market to more than 10 percent in both the Houston and Atlanta regions and, overall, held an 8.5-percent market share in its 29-state marketing region in the East, South and West. Gulf's gasoline volume declined two percent to 469,000 barrels per day during 1977. Gulfcrest, the Company's unleaded gasoline, accounted for 26 percent of total gasoline sales, compared with 19 percent in 1976.

Sales of distillate, primarily Diesel fuel and heating oil, increased 6.6 percent to 271,200 barrels per day as customers converted from scarce supplies of natural gas. During the first

quarter of 1977—the coldest winter in the nation's history—the Company incurred heavy costs to insure that its customers had sufficient quantities of heating oil. Gulf's refineries maximized distillate production, and the Company purchased 2.6 million barrels of product, much of it imported, at prices higher than could be recovered in the marketplace.

Distillate and residual fuel oil were removed from federal price controls in mid-1976, permitting an improvement in profit margins throughout 1977. However, gasoline prices remained under controls imposed four years ago, and toward the end of the summer driving season this forced the Company to temporarily roll back gasoline prices. Gulf's average sales price for refined products was 41 cents per gallon in 1977, up from 37 cents in 1976. Crude oil and manufacturing costs, however, rose 3.7 cents per gallon.

### "Gulfpriide Super G" in Market Test

The lubricating oil business, which has been quite profitable for Gulf, is undergoing a significant change with several companies offering synthetic lube oils designed to promote fuel efficiency while offsetting diminishing supplies of traditional lube grades of crude oil. During October, Gulf began testmarketing a completely synthetic lube, "Gulfpriide Super G," made of polyalphaolefins. Also under development is an extended-drain motor oil blended from conventional lube oils and synthetic fractions.

Gulf enjoys a strong market position in several lines of specialty consumer and industrial products such as charcoal lighter, newsprint ink oil and electrical transformer oil.

Gulf's seven U.S. refineries operated at 93 percent of capacity during the past year, processing an average of 840,300 barrels of crude per day compared with 814,600 barrels per day in 1976. Capacity at Gulf's largest refinery at Port Arthur, Texas, was increased by 22,400 barrels per day, or seven percent, through a modernization program. No further additions or capacity modifications are currently scheduled.

### Safety Milestones Reached

Two significant milestones were reached in 1977. First, a \$20-million program initiated in 1973 to improve energy conservation at the Company's refineries was completed, resulting in a 15-percent reduction in fuel use and a consequent cost savings of \$50 million a year. Second, in November, em-

ployees of the Cincinnati refinery achieved a million man-hours without a lost time accident, while employees at the Venice, Louisiana, refinery completed five accident-free years.

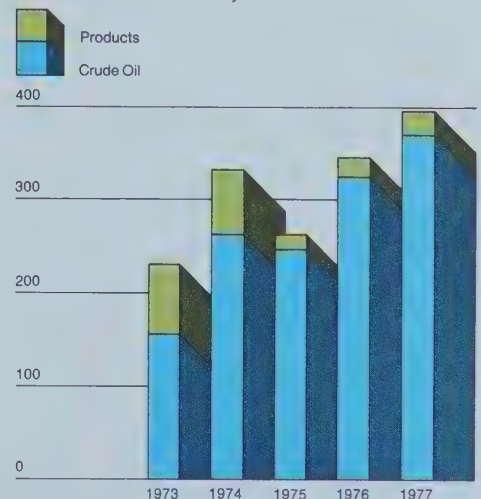
Reliance on foreign crudes increased in 1977 and accounted for 44 percent of the Company's refinery feedstock compared with 39 percent a year earlier. Most of Gulf's crude imports come from West and North Africa, with only 11 percent coming from the Middle East.

Despite this growing dependence on imported crudes, Gulf decided to withdraw from Seadock, Inc., a consortium of importers that plans to build a deep-water crude oil unloading terminal for supertankers off the Texas coast. The licensing requirements imposed by the U.S. Department of Transportation raised serious questions about the rights of Seadock's owners to operate and manage the terminal and imposed unprecedented and open-ended liabilities on its shareholders.

Colonial Pipeline Company, in which Gulf has a 16.8-percent interest, inaugurated a \$310-million expansion of its system to increase capacity to 2.1 million barrels per day from 1.8 million. The Colonial system is the principal transportation link for refined products between Texas and Louisiana Gulf Coast refineries and Atlantic Seaboard markets.

## Crude Oil and Product Imports into the U.S.

Thousands of Barrels Daily



(Clockwise from left): a newly acquired service station in Switzerland; the catalytic reforming unit at the Port Arthur refinery which is being upgraded to meet EPA lead-reduction standards; and Zip Rip insulation on petroleum tanks to reduce energy consumption at the Philadelphia refinery.



## INTERNATIONAL

Gulf's refining and marketing business in Europe earned \$20 million in 1977, including \$46 million from a reduction in crude oil and product inventory levels. This compares with a \$26-million operating loss in 1976.

The Company also has minority interests in other downstream operations in Europe, which contributed \$26 million to 1977 profits compared with equity earnings of \$27 million in 1976.

Several factors contributed to the weakness in European petroleum operations. The industrywide climate was adversely affected by generally depressed demand coupled with large excesses of available crude oil, refined products and refinery capacity. Gulf's refineries operated at only 65 percent of capacity during the year. And with limited access to lower priced Saudi Arabian crude oil, the Company operated at a competitive disadvantage during the first half of the year when OPEC maintained a two-tier price system.

On the positive side, Gulf achieved an improved product mix and continued its cost reduction and restructuring programs. The overall strengthening of European currencies against the U.S. dollar had a slightly favorable effect on earnings in 1977. In addition, many European governments responded more promptly to increased crude costs by allowing a more reasonable cost pass-through.

In what amounted to a no-growth market last year, Gulf was able to increase its refined product sales four percent to 233,000 barrels per day, with gasoline accounting for 20 percent.

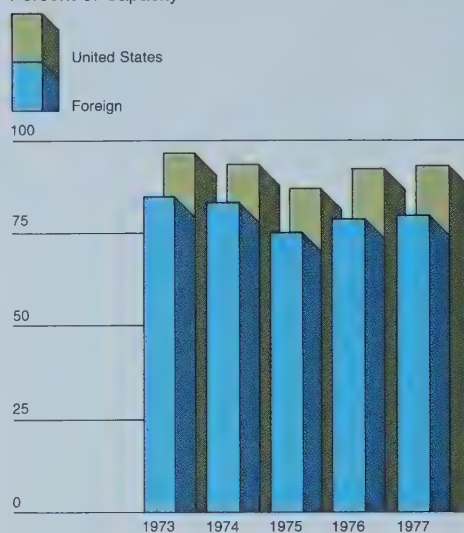
### European Expansion Under Way

During the past year, the Company initiated several programs to take advantage of a prospective improvement in the European business climate. In July, the Company announced that it was joining with Texaco in the construction of a 65,000-barrel-per-day catalytic cracking complex at Pembroke-Milford Haven, Wales, to convert fuel oil to gasoline. The investment should improve the Company's manufacturing flexibility and product mix throughout Europe.

In August, Gulf acquired Chevron's 162 retail outlets in Switzerland, which, when added to the Company's existing 305 Swiss outlets, make Gulf the fourth largest marketer in that country. This will allow the Company to better utilize the Cressier refinery in Switzerland, in which it has a 25-percent interest. At the same time, Gulf decided to withdraw from retail marketing in Norway, where its position was marginal.

## Refinery Utilization

Percent of Capacity

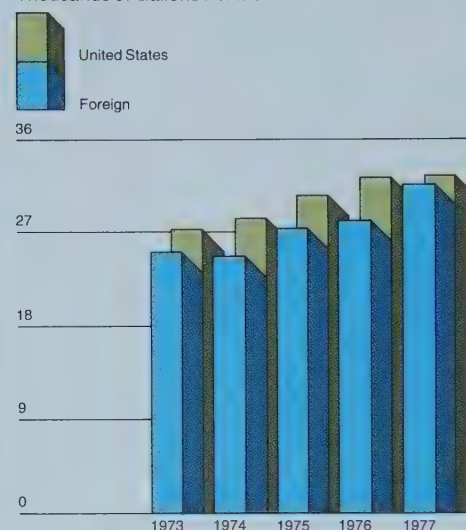


The Company has 4,000 retail outlets in nine countries in Europe, and wherever permitted, Gulf has increased its self-serve units. Approximately 60 percent of its total retail volume in 1977 was marketed through self-serve pumps.

Profits from Gulf's refining and marketing operations in Latin America and Asia declined in 1977. Among the con-

## Gasoline Sales Per Outlet

Thousands of Gallons Per Month



tributing factors were a strike at the Puerto Rican refinery and the refusal by the government of Korea until May to grant a product price increase to offset the January 1 hike in OPEC crude costs.

During the year, the China Gulf lube oil facility in Taiwan initiated an expansion program to double its output of premium quality lubricating oils.

### Lead Phasedown Proves Costly

"Get the lead out" has been a rallying cry for environmentalists for years. But this translates into a multi-million dollar commitment for Gulf, higher prices for the motoring public and increased crude oil imports for the nation.

The Environmental Protection Agency (EPA) has limited the amount of lead antiknock compound that can be used in the nation's total gasoline pool during 1978 to 0.8 grams per gallon. Six of Gulf's U.S. refineries are expected to be in compliance and a waiver has been granted for the Port Arthur refinery until a \$60-million, 40,000-barrel-per-day catalytic reformer can be completed and put in service by October 1, 1979.

By then, the lead content in all gasoline must be reduced to 0.5 grams per gallon. To meet this requirement and meet projected demand increases for unleaded gasoline, Gulf may need to invest another \$150 million. Of course, these costs must be borne by the motoring public.

EPA's intention to eliminate a manganese-based, octane-improv-

ing additive, MMT, by September 15, 1978, could make Gulf's lead-reduction efforts even more expensive and its refineries even less efficient. The proposed ban is in response to the automobile industry's belief that MMT adversely affects the performance of catalytic converters and causes deterioration of emission control devices. Gulf has sold 1.9 billion gallons of unleaded gasoline since 1975 containing this additive with no quality or performance complaints. Should MMT be banned, it would reduce Gulf's annual gasoline production about two percent, or 126 million gallons, or would require that an additional 12 million barrels of crude be processed each year to replace this volume.

A study to determine the effects of MMT is currently being conducted in California by the Coordinating Research Council on 63 different types of automobiles. Gulf believes that the national objective of energy conservation can best be served by continued use of MMT in motor gasoline, unless and until it is clearly demonstrated that this gasoline additive is unsuitable.



# CHEMICALS

After years of strong, although cyclical growth, the 1977 performance of Gulf's chemical operations was one of disappointment. Operating earnings, primarily related to Gulf Oil Chemicals Company, fell to \$75 million from \$182 million in 1976. Revenue rose 15 percent to \$1.21 billion.

Sharp earnings declines were experienced by many chemical companies in 1977 as overcapacity in the basic petrochemicals prevented producers from recovering higher feedstock and operating costs. Although there is little indication that the present weak market condition will be reversed soon, Gulf firmly believes that over the coming years it will be more profitable to sell hydrocarbon molecules as chemicals than as fuel.

## UNITED STATES

In most United States product lines, lower earnings did not represent declines in either volumes or selling prices, but rather a squeeze on profit margins. This was particularly true in the basic petrochemicals and chemical intermediates which account for 56 percent of Gulf's external sales. These products are ethylene, propylene, benzene, cyclohexane, cumene, and styrene—large-volume chemicals sold to major customers for further processing into plastics, paints, anti-freeze, synthetic fibers and building materials. In a delayed reaction to the 1975 recession, many of these customers canceled or deferred their derivative plants upon which the present capacity in the bulk petrochemical industry was planned and built.

The impact can be seen in ethylene, where 3.5 billion pounds in annual capacity was brought on stream during 1977, including 1.2 billion pounds by Gulf, while ethylene demand rose by only 1.4 billion pounds. The industry operated at an average 79 percent of capacity and new suppliers bought market share by holding prices below those needed to recover increased production costs.

Overall, Gulf's U.S. petrochemical plants operated at 65 percent of capacity.

Start-up costs associated with the new olefins plant at Cedar Bayou, Texas, which began production in March, and a fire in August at the Port Arthur, Texas, aromatics unit, also contributed to the decline in 1977 earnings.

As the nation's largest producer of cumene, which is used in the manufacture of phenol and acetone, Gulf has become alarmed over a threefold in-

crease in cumene imports in recent years. Imports currently account for one-third of the U.S. market. In December, the Company filed anti-dumping charges against cumene producers in the Netherlands and Italy who have been pricing their product in the U.S. market at unfairly low prices.

## Gulf Seeks Growth in Plastics

Gulf's plastics business did not encounter the same degree of overcapacity in 1977 and the Company experienced a lower, but relatively healthy, business in polyolefins. Gulf's largest volume plastics are low- and high-density polyethylene, which are used in packaging, pipe and housewares.

Particularly rewarding during 1977 was the Company's initial sale of polypropylene flake to the automotive market. Gulf was selected to supply all of the plastic resins—about 3.5 million pounds—to be used by one major auto division in molding fender liners, fan shrouds and leaf screens for its 1978 models.

In order to move further downstream toward the consumer, Gulf's future capital spending will be heavily weighted toward an expansion of its plastics business. Completion of a 240-million-

## Toxic Substances Gain Attention

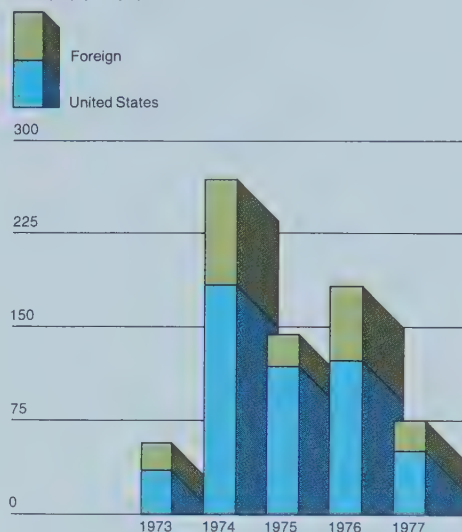
Gulf has always sought to insure that its employees have a safe working environment and that its customers are not endangered by its products. As a result, the Company is in a good position to comply with the Toxic Substances Control Act (TOSCA), which became effective January 1, 1977.

Safeguards covering benzene, an important product manufactured and consumed by Gulf, offer an example of the Company's efforts. For years, Gulf has had a program to protect employees working with benzene. The air in benzene production areas is monitored regularly and those employees exposed to the chemical are given frequent physical examinations.

As the Company has increased its chemical product line, and as new regulations involving the manufacture and use of toxic substances have been implemented by the Occupational Safety and Health Administration and the Environmental Protection Agency, the level of the Company's occupational medical activity has been corre-

## Chemical Operating Profit

Millions of Dollars



pound-per-year, high-density polyethylene expansion at Orange, Texas, is scheduled for mid-year as is a 400-million-pound-per-year polypropylene facility at Cedar Bayou.

Early in 1978, Gulf acquired from Union Carbide Corporation a 250-million-pound-per-year polystyrene plant at Marietta, Ohio, marking Gulf's entry

spondingly elevated. For instance, Gulf has increased both the number and frequency of its employee examinations and air samplings, and automated its industrial hygiene laboratory to operate on a 24-hour basis.

However, additional work will be necessary to comply with TOSCA requirements that all manufactured chemicals be registered and many tested for their environmental and health effects. To put this into perspective, it is estimated that thousands of new chemicals or variations of existing chemicals are generated each year in the U.S. Gulf is presently recording hundreds of existing chemicals to meet TOSCA's May 1, 1978, deadline.

To insure that this increased activity can be handled in a quality and timely fashion, Gulf is planning a new toxicological laboratory in conjunction with Carnegie-Mellon Institute of Research in Pittsburgh. Of course, the costs of these accelerated health and safety programs must eventually be passed through to the ultimate consumer.







into that plastic while providing an assured market for a portion of its styrene output.

During 1977, Gulf acquired 2,000 acres in Victoria, Texas, as a site for future expansion. The property is one of the few remaining Gulf Coast locations that meets the strategic and environmental requirements for a major new chemical plant.

#### **Kewanee Brings Diversification**

The acquisition of Kewanee Industries, Inc. represented a further downstream diversification by the Company and opens a new range of chemical opportunities which should lessen the cyclical swings that continue to plague all bulk petrochemical producers. Kewanee's two chemical operations, The Harshaw Chemical Company and the Millmaster Onyx group, should add approximately \$400 million to 1978 revenue. Together, these two companies employ 5,000 people at 33 locations in the U.S. and eight in Europe and Latin America.

Harshaw produces a variety of inorganic chemicals, including catalysts, pigments and industrial chemicals. In 1977 construction began on a specialty fluoride production center in Cleveland. Noteworthy was the continued growth in demand for the unique line of crystals and electronic specialties in which it holds a leadership position.

Millmaster Onyx produces specialty surfactants for cosmetics, as well as household and textile chemical specialties, printing inks and architectural products. Among its 1977 achievements were the completion of a continuous sulfation unit to provide new surfactants for the detergent industry, opening of a new plant for the manufacture of rigid urethane foam insulation, and initial work on a large unit for the separation of fatty acids.

Production facilities opened in October at the Oklahoma Nitrogen Company's 1,200-ton-a-day ammonia plant at Woodward, Oklahoma. Gulf acquired a 25-percent interest in the facility to become more self-sufficient in raw materials for its explosives operations. Field work also got under way in 1977 on an expansion of the Jayhawk, Kansas, plant to upgrade nitric acid to ammonium nitrate.

In an important new direction for Gulf, the design phase of a commercial-scale plant was initiated at Jayhawk to convert cellulose, the structural material of all plant life, into ethyl alcohol and other industrial chemicals.

*(Clockwise from left): the computerized control room at the new Cedar Bayou olefins plant; stenciling product drums; dry flow cars loaded with polyethylene; and the new ethylene unit in full operation at Cedar Bayou.*

This work grew out of research that began in 1971 to find an alternate chemical feedstock source. Developing chemicals from biomass would mean an annually renewable raw material, a less expensive feedstock and an environmentally safe manufacturing technique.

#### **INTERNATIONAL**

Gulf's European petrochemical operations at Europoort, the Netherlands, and Milford Haven, Wales, made a nominal profit in 1977 after enjoying an exceptionally good year in 1976. A number of special situations and one-

time market opportunities in 1976 gave way last year to industry overcapacity and a weak economy which adversely affected performance. This depressed market condition is expected to continue over the near term.

Gulf's participation in Asia is limited, but the outlook remains strong. In January 1977, Gulf announced a joint venture to manufacture and market low-density polyethylene in Southeast Asia through the Asia Polymer Corporation in Taiwan. A 50-percent increase in ethylene and propylene capacity in Korea came on production in February 1978.

## **CANADA**

Net income for Gulf Oil Canada Limited increased 12 percent to \$185 million (Canadian) in 1977, representing the highest earnings level in the Company's history. However, because of currency translation losses associated with the decline in the value of the Canadian dollar, Gulf's 68.2-percent share of operating earnings fell by \$29 million to \$91 million.

In common with the rest of the industry, Gulf Canada's production volumes of both natural gas and crude oil have been declining in recent years. The industry's extensive exploration efforts in Western Canada, brought about by improved natural gas prices and profit margins, produced a gas surplus in 1977. As a result, some capacity was shut in, and Gulf Canada's net gas production declined 6.5 percent to 302 million cubic feet per day. Net crude oil production, which is affected by higher provincial royalties and decreased exports to the United States, declined 6.8 percent to 66,200 barrels per day.

Canadian government policy of scheduled increases in the wellhead price of crude oil and natural gas has resulted in healthy revenue gains for producing companies despite higher federal and provincial taxes. During 1977, the price of crude oil in Canada increased to \$10.75 per barrel from \$9.05 a year earlier, and natural gas prices in Alberta averaged \$1.44 per thousand cubic feet, compared with \$1.09 in 1976.

The higher cash flow which has resulted has enabled Gulf Canada to increase its capital and exploration expenditures fivefold since 1973. Spending in 1977 reached \$493 million, 53 percent above the \$323 million spent in 1976. Particularly significant is the fact that exploration expenditures of \$152 million were double the level of a year earlier.

Drilling activity increased 40 percent

in 1977 with the Company participating in the completion of 173 wells, 125 of which were successful. The Company has one of the broadest-based acreage positions in Canada, with an interest in 113 million acres in the most promising areas of the country.

#### **Western Canada Activity Increases**

More than two-thirds of the Company's exploration spending in 1977 was in Western Canada, primarily directed toward developing gas prospects in the deep foothills such as the Robb-Hanlan area of Alberta where Gulf Canada now has an interest in four gas wells, with two delineation wells under way. In 1977, Gulf Canada had an interest in 42 wells drilled in Western Canada which resulted in 17 gas and oil discoveries.

The recent industry oil discoveries in the West Pembina area of Alberta have rekindled oil prospects in the province. The Company was successful in acquiring several valuable properties in the area where exploration will be carried out during 1978.

In the Mackenzie Delta, Gulf Canada has a 75-percent interest in two trillion cubic feet of probable gas reserves found at Parsons Lake and Ya-Ya, or about one-third of the estimated reserves for the Delta. However, because of the rejection by the Canadian and U.S. governments of the Arctic Gas Pipeline route, Gulf Canada has halted further exploratory drilling in the Delta as well as plans for a \$400-million gas processing plant. Future activities will be limited to lease maintenance until the economics of an alternate pipeline route paralleling the Alaskan Highway can be determined.

Gulf Canada has a major acreage position in the highly promising Beaufort Sea and participated in two of the three wells drilled there last summer. Both wells tested gas. Because of the short drilling season, neither well was completed and further drilling is plan-







ned at both locations in the summer of 1978. Although a well from a drillship in the Arctic costs roughly \$35 million, or 10 times as much as onshore wells in the Mackenzie Delta, favorable tax treatment by the Canadian government provides a necessary incentive.

In the Arctic Islands, the Company had an interest in two wells which were drilled and abandoned during 1977 and in two others which were being drilled from ice islands at year-end. A planned well off the west coast of Greenland was deferred after other operators encountered disappointing results.

### Syncrude Project Nears Completion

Much of the Company's capital program over the past four years has involved its 16.75-percent interest in the \$2.1-billion Syncrude project in Northern Alberta. The joint industry-government effort to mine and recover synthetic crude oil from the Athabasca tar sands will begin production in the summer of 1978. Gulf Canada's investment in the project already totals \$280 million and another \$70 million will be required before design capacity of 125,000 barrels per day is reached.

The Company is also active in the experimental in situ recovery of heavy oil deposits that are buried too deeply to permit mining recovery. Two such projects are under way in Northern Alberta, involving steam stimulation and fireflooding techniques. In addition, some prime acreage was acquired during 1977 in the Athabasca region.

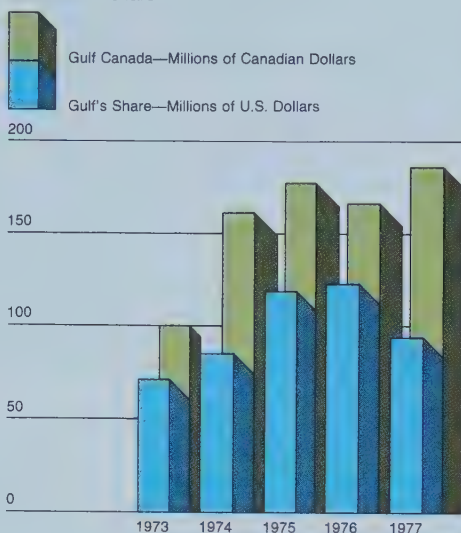
### Downstream Profits Erode

With five refineries and two asphalt plants strategically located across the country, Gulf Canada is the nation's second largest refiner with a total capacity of 379,000 barrels per day, or about 17 percent of the national total. The Company sells a full range of petroleum products in all provinces and the northern territories through a network of 3,760 retail outlets, which is a 36-percent reduction from 5,860 service stations carrying the Orange Disc in 1970.

The Point Tupper refinery in Nova Scotia, which operated at about 60-percent capacity during 1975 and 1976 due to U.S. import regulations, obtained short-term processing agreements with other marketers and operated at 82 percent of capacity in 1977. Overall, crude oil processed by Gulf Canada refineries during 1977 was 16 million barrels more than in 1976.

### Canadian Earnings

Millions of Dollars



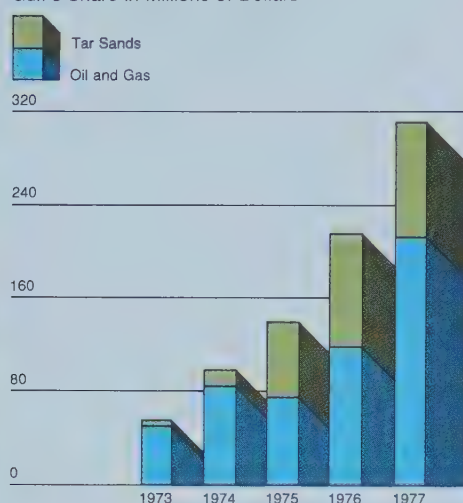
Although refined product sales increased 11 percent over 1976 to 286,400 barrels per day, severe price competition held returns below an adequate level considering the Company's investments. Translation losses on the Canadian dollar further eroded downstream earnings.

A \$210-million expansion of lubricating oil facilities at the Clarkson refinery in Ontario reached 65 percent of completion by year-end and is scheduled to begin operation in late-1978.

A sulfur-asphalt paving process developed by Gulf Canada is being tested on a Michigan highway. Prior tests in

### Canadian Petroleum Capital and Exploration Expenditures

Gulf's Share in Millions of Dollars



Canada demonstrated that the replacement of up to 50 percent of the asphalt binder with elemental sulfur produces a longer lasting road surface with lower material and installation costs.

At the urging of the federal and provincial governments, Gulf deferred the planned shutdown of its technically outmoded acetylene black and calcium carbide operations in Shawinigan, Quebec. Government grants and a new labor contract that improves productivity will preserve 365 jobs in Quebec as the plant continues to operate on a year-to-year basis.

### Gulf Has Big Stake in Quebec

Gulf Canada's involvement in Quebec is considerable. The Company has 2,300 employees, or more than 20 percent of its workforce, and \$270 million in gross investment, or 13 percent of its total investment in property, plants and equipment, located in the province.

The Parti Québécois, which forms the provincial government, is actively seeking some form of independence from the rest of Canada—"Sovereignty-Association"—and Quebec Premier René Lévesque has announced a referendum on the issue within two years.

In August of 1977, the provincial legislature made French the official language of Quebec. In anticipation of this, Gulf Canada has taken steps over the past several years to make it possible for French Canadians to work in their own language in its Quebec operations.

The Company is hopeful that the legitimate aspirations of French Canadians can be achieved within the framework of the Canadian

confederation. Quebec receives many economic benefits as part of the Canadian confederation, including an equalization of crude oil prices which protects its consumers from the higher prices of imported oil upon which the province depends for more than half of its total petroleum needs. Gulf Canada feels that the separation of Quebec would be a tragedy for all Canadians.

While some Quebec companies, fearing the worst, have announced plans to withdraw from the province, Gulf Canada has made it clear that it has no intention of walking away from its employees and assets in Quebec so long as the Company has a prospect of earning a reasonable return on its investments there. To date, a spirit of mutual cooperation has prevailed, as demonstrated by steps taken by the Quebec government to improve the economics of Gulf's aging Shawinigan chemicals plant and permit it to continue operations and provide needed employment.

(Clockwise from above): the Clarkson refinery in Ontario; a Gulf rig drills one of 42 wildcats in Alberta's foothills; venting steam used for in situ recovery of heavy oil; and a giant bucketwheel reclaimer is nearing final assembly at the Syncrude project in Northern Alberta.







# MINERALS

The year 1977 was one of firsts for Gulf Mineral Resources Co. The Company produced its first United States uranium, began development work on its vast oil shale tract in Colorado and recorded a profit.

Operating earnings of \$10 million in 1977 compared with an operating loss of \$34 million in 1976. In the U.S., The Pittsburg & Midway Coal Mining Co. (P&M) contributed \$16 million to operating profits compared with \$15 million a year earlier. But extensive development of minerals, uranium and other alternate energy sources kept total U.S. operations in a loss position. Uranium operations in Canada earned \$27 million in 1977 compared with \$6 million the year before.

Capital and exploration expenditures totaled \$120 million in 1977 compared with \$91 million a year earlier, with 93 percent being spent on projects in the U.S. At year-end, Gulf had more than \$400 million invested in its mineral operations in North America, and the Company expects to spend twice that amount over the next five years to further increase its coal and uranium production and to develop other non-petroleum energy sources.

## UNITED STATES

Coal production increased 7.6 percent to 8.5 million tons in 1977, including 250,000 tons in the fourth quarter attributable to Kewanee's 24-percent interest in a mine in Montana.

The rest of Gulf's production increase came from P&M's McKinley mine near Gallop, New Mexico, where a major expansion is under way to lift production capacity to five million tons a year by 1979. The second of four 55-cubic-yard draglines was put into service during 1977 to remove overburden from the coal seams which lie up to 120 feet beneath the surface. The two remaining draglines are expected to be placed in service in 1978.

During the year, 57 percent of the Company-operated production came from surface mines west of the Mississippi River, where BTU values are relatively low. Kentucky coal, which is higher in heating value and sulfur content, accounted for the remaining production—26 percent coming from

surface mines and 17 percent from underground mines. Virtually all of the Company's coal is sold under long-term contracts to utilities.

Gulf has owned and leased coal reserves, not counting the Kewanee interests, approaching one billion tons which is sufficient to support a planned expansion into the 1980s.

## Federal Policies Slow Development

Uncertain and often conflicting government policies on the mining and use of coal pose major problems in planning new mine development. In response to the Clean Air Act, the Strip Mine Bill and the Federal Coal Leasing Act, all of which were passed by Congress in 1977, Gulf has deferred development of a major new surface mine in Wyoming while increasing its marketing flexibility by acquiring new reserves in the eastern states.

In December, P&M reached a new 40-month labor agreement with its employees at the Edna mine, near Steamboat Springs, Colorado, and at McKinley, keeping these mines in operation during the United Mine Workers' strike which shut down Eastern production from December and into 1978. Nevertheless, the strike cost P&M approximately 600,000 tons of output in 1977.

## U.S. Uranium Production Begins

In October, Gulf produced its first uranium in the U.S. from the Mariano mine near Grants, New Mexico. The event capped a decade of exploration and development efforts in the Southwest.

The mine is small, but at a relatively shallow depth of 500 feet. The mine's reserves of 3.5 million pounds will be produced over a four-year period, but delivered over eight years to a U.S. utility. Production in 1977 totaled 60,000 pounds and the ore is being toll-milled by another company.

Significant progress was made during the year at the Mt. Taylor mine, in New Mexico, where Gulf is developing a uranium deposit estimated to contain more than 100 million pounds of ore. The service and production shafts reached the 2,700-foot level by year-end, more than twice their 1976 depths. Special depressurization wells and grouting reduced earlier water problems and it is believed that pilot mining at a depth of 3,300 feet can begin in 1979. However, full production is not expected until the early 1980s, after a mill has been constructed.

The Mt. Taylor project poses some of the most difficult engineering problems the mining industry has ever encountered. And for Gulf, it will be the most

costly single project in the Company's 76-year history.

## Synthetic Fuel Technology Advanced

In September, Gulf and its partner, Standard Oil Company (Indiana) received approval from the Department of the Interior on a development plan for their jointly owned 5,100-acre oil shale tract in Colorado. The companies approved a \$93-million program which will test the feasibility of using an in situ process to extract the oil from the rock in underground retorts. The development work is also expected to satisfy the remaining \$84 million in lease bonus requirements and preserve the companies' access to this substantial resource, on which \$165 million already has been jointly invested.

The initial phase of the in situ program is expected to be completed in 1981, at which time the partners will decide whether further development is warranted. A number of technical problems remain to be solved and even with favorable economic conditions, significant production is at least a decade away.

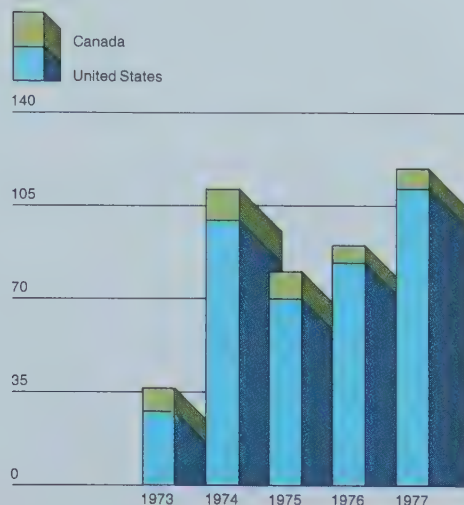
Gulf has proposed to the Department of Energy its participation in the development of a \$400-million-plus, 6,000-ton-per-day demonstration plant for Gulf's Solvent Refined Coal liquefaction process. The technology was proven during 1977 in a government-funded pilot plant at Ft. Lewis, Washington, which produced a liquid boiler fuel that is environmentally acceptable, but more costly than imported distillates at current prices.

## CANADA

Production from the Rabbit Lake uranium mine and mill complex in Northern

## Minerals Capital and Exploration Expenditures

Millions of Dollars

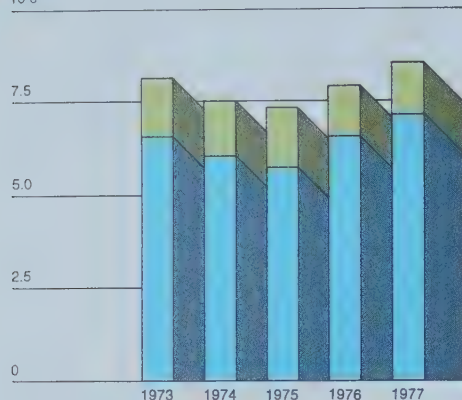
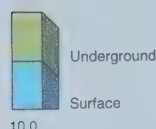


(Clockwise from left): the Solvent Refined Coal pilot plant in Ft. Lewis, Washington; initial shaft sinking on Gulf's oil shale tract in Colorado; blowing mulch on reclaimed land at the McKinley mine; and at Mt. Taylor, New Mexico, the two shafts for Gulf's uranium mine are being sunk toward their target depth of 3,300 feet.



## Coal Mined

Millions of Tons

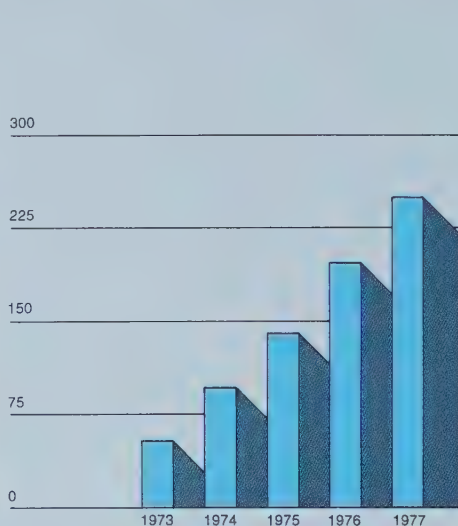


Saskatchewan exceeded its annual design rate of 4.5 million pounds during 1977. Production totaled five million pounds, of which Gulf's share was 2.6 million pounds compared with 1.9 million pounds in 1976. Gulf's 1977 sales were to Finnish and Swiss utilities, at prices approved by the Canadian government's Atomic Energy Control Board, and to Uranerz Canada Limited, Gulf's partner in the mine.

During 1977, Canada imposed an embargo on uranium exports to countries which had not signed bilateral nuclear safeguard agreements with

## Environmental Expenditures

Millions of Dollars



Canada. This embargo, which did not affect Gulf's 1977 shipments, was lifted for most European countries on an interim basis on December 30, 1977, and a similar interim agreement was reached with Japan in January 1978.

Gulf continues an active exploration program in Canada, with uranium prospects in Saskatchewan being most encouraging.

Gulf Oil Canada entered an initial coal venture with Rimrock Mining Corporation in 1977 to explore 5,000 acres of metallurgical coal reserves in South-western Alberta.

## Reclamation Expenditures Soar

It is Gulf's Corporate policy, as well as its long-standing practice, to surface mine only those lands which can be restored to a level of productivity at least equal to that existing before mining.

The Pittsburg & Midway Coal Mining Co. began its reclamation operations voluntarily in 1938 and is recognized as an industry leader in the development of reclamation technology. Reclaimed land at one of the Company's western mines, for instance, will support a substantially higher level of livestock production than was possible before mining.

This progress has been carried out under existing laws in the states in which the Company operates. In 1977, however, a new—and in Gulf's view unnecessary—burden of bureaucratic regulation and expense was added through passage of the twice-vetoed Federal Surface Mining Bill. The law imposes national standards for the issuance of mining permits, inspections and compliance which dis-

regard such important considerations as local topography, climate and land use requirements. By opening the door to legal intervention by third parties, the new regulations threaten to delay new mining operations and will require considerable judicial time for review and clarification. The cost of this burden, both in time and money, must ultimately be shouldered by the energy consumer.

Gulf's commitment to reclamation was backed by expenditures of \$7.5 million in 1977—or nearly \$1 per ton of coal mined—a 60-percent increase from the \$4.7 million spent a year earlier. As a result of the new surface mining bill, 1978 costs are expected to nearly double to more than \$14 million. At one mine, for example, the law's stringent topsoil requirements will require nearly a 40-percent increase in labor—and a resulting decline in productivity. The Company also invested \$2 million in capital funds for reclamation equipment last year and will spend \$11 million for such hardware in 1978.

# OTHER ACTIVITIES

## Science & Technology

Gulf's research and development activities, primarily conducted by Gulf Science & Technology Company, required expenditures of \$70 million in 1977, an increase of nine percent over the \$64 million spent in 1976.

Because of the pressing need for increased energy, emphasis was placed on the development of: exploration systems to better identify potential hydrocarbon reserves; enhanced recovery techniques to coax additional crude oil from existing reserves; and processes to produce fuels from alternate sources. Among the achievements during the past year were significant improvements in a three-dimensional seismic image method which uses sound waves to detect subsurface accumulations of oil and gas, and the development of analytical instruments to measure minute surface seepages of hydrocarbons at the parts-per-billion level.

Enhanced recovery efforts were concentrated on ways to improve efficiency and reduce costs. For fireflood projects, where air is injected into a reservoir to ignite and displace unrecovered oil, a gas turbine system is being developed to utilize energy from the flue gas which would otherwise be both wasteful and a potential pollutant. This would substantially improve the economics of such projects by reducing air compressor fuel costs. Development of tertiary recovery methods offers high promise, since only about one-third of crude oil reserves can be recovered through conventional production efforts.

In response to increasing influence by the United States government in energy research, Gulf is stepping up its involvement in government-funded projects. Four contracts were undertaken in 1977 to draw on Gulf's expertise in areas of coal gasification and liquefaction, catalytic processes and petroleum refining. Gulf's goals are twofold: to establish a technical position with the government which might be advantageous to the Company in the development of future energy businesses, and in this way to participate in the direction of government energy policy.

An example of this work is a \$14-million cost-sharing contract with the Department of Energy (DOE) to develop an in situ coal gasification process to recover coal that cannot be mined by conventional methods. It is estimated that 100 billion tons of coal in the U.S. occur in seams which decline too



steeply to be mined under present technology. About 25 percent of this is suitable to underground gasification recovery methods.

Gulf is also discussing with the DOE a proposal to build a small pilot refinery to process coal liquids to be produced by various processes around the nation.

In the environmental area, Gulf's worldwide expenditures to comply with environmental standards increased to \$248 million in 1977 from \$195 million a year earlier. Nearly 77 percent of these expenditures were made within the U.S., where water pollution controls at refinery and chemical plant locations continued to receive priority.

### General Atomic

Prior to 1977, General Atomic Company, Gulf's joint venture with a Royal Dutch/Shell Group company, canceled its contracts and currently has no commercial reactor orders. However, research on the development of High Temperature Gas-cooled Reactor (HTGR) technology continued during 1977. Several utilities are discussing the possibility of forming a utility group to sponsor further HTGR development, and the DOE is considering support for this program. Work on a gas-cooled breeder reactor also proceeded during 1977 under the auspices of a group of utilities known as the Helium Breeder Associates. The DOE is also supporting this program as well as a controlled thermonuclear fusion program at General Atomic.

A demonstration HTGR plant at Fort St. Vrain, Colorado, continued to encounter mechanical and regulatory delays during 1977, which required the plant to be shut down at times. The reactor produced power for the first time late in 1976 and in successive steps last year was granted permission to operate at 70 percent of power capacity while tests continue.

In view of current national policy on nuclear fuel reprocessing, Gulf no longer expects to be able to obtain in the foreseeable future an operating license for the Allied-General Nuclear Services facility at Barnwell, South Carolina, in which General Atomic is a joint owner. Minimal DOE funding is being provided through September 30, 1978, while the government studies possible uses for the facility.

Gulf's share of General Atomic's losses amounted to \$18 million in 1977, compared with \$19 million a year earlier. A full discussion of financial and legal issues involving General Atomic is covered in Note 6 on page 32.

### Real Estate

In recent years, Gulf has invested in several major real estate development

projects. These projects include Reston, Virginia; Ocean Village at Fort Pierce, Florida; and Venture Out in America, a chain of recreational vehicle parks. Reston has been widely acclaimed as one of the most successful new towns in the U.S. Nevertheless, these projects are not closely related to Gulf's basic business and have not made a meaningful contribution to Corporate profits. Therefore, during 1977, Gulf's management carefully reviewed its real estate development activity and concluded that Gulf should divest itself of these projects.

In order to carry out an orderly divestment program, Gulf has retained two leading real estate firms. Gulf will continue to develop the projects until they are sold and does not expect that this divestment will have any material effect upon its earnings or financial position.

### Gulf People and Support Services

Gulf has long recognized that its presence in a country or a city carries a civic responsibility beyond that of just being a good employer or a provider of quality products. In keeping with this tradition, Gulf and Gulf people became involved in a number of community projects during 1977 which enhanced the quality of life for all concerned.

In Great Britain, Gulf sponsored a series of eight concerts by the Scottish National Orchestra and donated the proceeds toward the construction of a new Deaf Community Center in Aberdeen.

The Company extended for another two years, until 1980, its funding of the National Geographic Specials on public television. Eight new programs are being underwritten by Gulf at a cost of \$2.8 million, bringing the Company's total grant over five years to \$6.5 million, the largest single grant ever made for an American-produced public television series.

In February, Gulf provided financial assistance to the government of Nigeria in hosting one of the largest cultural gatherings ever held in Africa—the Second World Black and African Festival of Arts and Culture.

On a different scale, Gulf's Purchasing Department aided in an 11-month study of ways to streamline the methods of buying goods and services used by Allegheny County, Pennsylvania. All 30 of the study's key cost-saving recommendations were accepted.

Gulf, including Gulf Oil Foundation, contributed approximately \$5 million for charitable and educational purposes during 1977 compared with \$5.4 million in 1976. Higher education was the recipient of \$3 million either as direct support to colleges and universi-

ties or indirectly through scholarships to students.

United Funds in communities where Gulf employees live received a total of \$650,000 in 1977. Another \$1.4 million was distributed to hospitals, cultural organizations, conservation groups and to a number of community services.

In 1976, Gulf changed its formula for matching employee gifts to include private secondary schools, hospitals and certain cultural activities as well as institutions of higher learning, and as a result employee contributions matched by the Company more than doubled in 1977 to nearly \$700,000.

The Company continued its efforts to increase its minority and female employment levels in 1977, with minority employment increasing to 15.1 percent of its U.S. workforce and female employment increasing to 18.7 percent. Both represented gains over 1976 and significant increases over 1972, when the Company's equal employment program was initiated.

During 1977, Gulf hired more than 4,100 new people, with women accounting for 30.8 percent and minorities accounting for 22.4 percent. Women also received 23.6 percent of all promotions in the U.S. last year, while 18.1 percent of all promotions were to minorities. While there have been percentage increases in each job category since 1972, the greatest growth in minority and female employment has been in the area of technicians.

The acquisition of Kewanee Industries added 5,700 people to Gulf's workforce, bringing total year-end employment to 59,400.

### Employees at Year-End

	1977	1976
Petroleum		
Exploration & Production ..	8,100	6,900
Trading & Transportation	3,600	3,300
Refining & Marketing ...	27,200	28,900
Chemicals .....	10,500	5,200
Minerals .....	2,300	2,000
Technical & Support .....	7,700	7,000
	<u>59,400</u>	<u>53,300</u>
United States ....	35,500	29,800
Canada .....	11,100	11,100
Other Foreign ....	12,800	12,400
	<u>59,400</u>	<u>53,300</u>



# FINANCIAL REVIEW

## Annual Earnings

Earnings declined 7.8 percent during 1977 to \$752 million, or \$3.86 per share, compared with \$816 million, or \$4.19 per share, in 1976. The past year fell short of expectations as a number of significant operating achievements were not matched by earnings gains. In the United States, natural gas production increased for the first time since 1972 and the decline in crude oil production, which began in 1970, was essentially stopped. However, some of the problems encountered in 1977, notably the decline in chemical earnings, are expected to continue into 1978.

For the first time the Company's geographic earnings presentation segregates the Company's upstream, or exploration and production, operations from its downstream business in refining and marketing. Also, in accordance with Financial Accounting Standards Board Statement No. 14, business segment operating earnings are presented on pages 28 and 29 in a manner that allows for a determination of net income for each of the significant geographic areas in which the Company operates.

In the U.S., natural gas production increased 8.9 percent to 1.86 billion cubic feet per day and Gulf's average realizations increased 24 percent to 56 cents per thousand cubic feet. Net crude oil production declined less than one percent to 336,300 barrels per day, while the Company's average wellhead price rose by 9.5 percent to \$8.09 a barrel. However, exploration and production earnings of \$514 million were essentially unchanged from a year earlier. Earnings did not reflect production or price levels for three primary reasons: a 33-percent increase in U.S. exploration expenses to \$272 million, the government's refusal to grant previously promised price increases on crude oil, and compliance with a natural gas delivery contract to Texas Eastern Transmission Corporation. Deliveries to Texas Eastern averaged 592 million cubic feet per day in 1977 compared with 362 million in 1976. All of such increase came from new fields in the Gulf of Mexico and was sold at the 1964 contract price of 21 cents per thousand cubic feet although the permissible interstate base rate on new gas contracts was \$1.47 per thousand.

U.S. refining and marketing operations posted an 18-percent gain to \$208 million in 1977. Operating earnings benefited from a seven-percent increase in distillate volumes and the decontrol of distillate prices offset to some extent by a two-percent decline in gasoline volumes. Crude oil imports increased 14 percent to 372,300 barrels per day in 1977, and refined product imports increased 39 percent to 25,800 barrels per day.

In Canada, exploration and production earnings declined five percent to \$208 million primarily as a result of higher exploration expenses and lower volumes of both crude oil and natural gas production. Canadian downstream earnings fell to \$43 million in 1977 from

\$71 million in 1976 in spite of an 11-percent increase in refined product sales. This decrease was primarily due to the decline in the value of the Canadian dollar.

Exploration and production efforts in Europe continued to post losses reflecting the Company's drilling program in the North Sea, where initial production began in February 1978. Downstream operations in Europe earned \$20 million (which included a \$46-million profit from the reduction in LIFO inventory levels during 1977) compared with a \$26-million loss in 1976.

Other foreign petroleum operations, primarily reflecting production in West Africa and the Middle East and international marine operations, declined to \$182 million in 1977, after taxes on income in foreign oil producing countries, compared with \$210 million a year earlier. Petroleum production and long-term crude purchases outside North America averaged 1.2 million barrels per day in 1977—a decline of 8.5 percent from a year earlier due to lower demand for Middle East crude and the Company's withdrawal from Ecuador at the end of 1976.

Worldwide chemical operating profits fell to \$75 million in 1977 from \$182 million in 1976 reflecting global overcapacity in the petrochemical industry. In the U.S., the Company incurred start-up costs at a major new olefins plant and earnings fell 60 percent, while weakened economics in Europe reduced earnings to \$4 million from \$35 million in 1976.

The Company's minerals operations reported worldwide operating profits of \$10 million compared with a \$34-million loss the previous year. Improved earnings attributable to U.S. coal operations, where output increased 7.6 percent to 8.5 million tons, were offset by costs associated with the development of the Company's U.S. uranium mines, where initial production of 60,000 pounds was reached in the fourth quarter. U.S. losses were reduced by the absence in 1977 of \$21 million in lease bonus payments made on a Colorado oil shale tract in 1976. Uranium operations in Canada, where production increased 35 percent to 2.6 million pounds, posted earnings of \$27 million compared with \$6 million a year earlier.

Overall foreign currency adjustments amounted to a loss of \$20 million in 1977 compared with a gain of \$16 million in 1976. See Note 20 on page 41.

Total foreign income taxes increased by \$58 million in 1977 primarily reflecting increased taxes in Angola due to a higher level of operations in 1977, offset to an extent by the absence of taxes in Ecuador. The reduction in U.S. taxes of \$15 million reflects lower income subject to U.S. taxes and the benefit derived from the Company's filing of tax returns on a separate basis for its U.S. subsidiaries, offset to an extent by lower investment tax credits in 1977 and higher U.S. taxes on prior-year foreign source income.

## Quarterly Earnings

Fourth-quarter 1977 earnings were penalized by a higher provision for U.S. income taxes and fell 19.7 percent to \$175 million, or 90 cents per share, from \$218



million, or \$1.12 per share. Kewanee Industries, Inc., which was acquired in September, contributed \$9 million to earnings in the fourth quarter.

U.S. exploration and production earnings increased modestly to \$133 million from \$127 million a year earlier. Increased natural gas production of six percent and a three-percent gain in crude oil production were the principal factors. Refining and marketing earnings improved 32 percent to \$50 million as higher refined product prices and reduced pension costs more than offset a five-percent decline in refined products sold.

Canadian exploration and production earnings increased 13 percent to \$71 million in the fourth quarter as higher selling prices this year more than overcame lower production of crude oil and natural gas. Exploration costs in the Mackenzie Delta were also lower in the 1977 quarter. Downstream operations had earnings of \$3 million in 1977 compared with earnings of \$10 million a year earlier as higher operating expenses more than offset slightly higher sales volumes.

Downstream operations in Europe earned \$37 million in the fourth quarter (which included a \$28-million profit from the reduction in LIFO inventory levels) compared with \$12 million a year earlier.

Other foreign petroleum earnings, after taxes on income in foreign oil producing countries, slipped to \$61 million compared with \$67 million the previous year. Fourth-quarter volumes declined 19 percent from a year earlier reflecting the heavy buying by third-party customers in late 1976 in anticipation of a price increase by the Organization of Petroleum Exporting Countries.

Worldwide chemical operations declined to \$18 million in the fourth quarter of 1977 from \$33 million a year earlier. The largest decline occurred in Europe where losses of \$2 million in the 1977 quarter compared with operating earnings of \$6 million in the 1976 period reflecting routine shutdowns of several units coupled with inventory control activities in a depressed market.

Total income tax expense was \$379 and \$404 million for the 1977 and 1976 fourth quarters, which equates to effective tax rates of 68 and 65 percent, respectively. The increase in the effective tax rate is primarily caused by higher U.S. taxes in the quarter and a decline in fourth-quarter pretax income. The increase in fourth quarter U.S. taxes of \$31 million results from lower investment tax credits and an increased provision for U.S. taxes on prior-year foreign source income.

A summary of the Company's financial results by quarters is set forth in Note 26 on page 43.

## **Debt**

Long-term debt of \$1.31 billion at year-end reflected an increase of \$139 million from December 31, 1976. This was the first year debt has increased since 1971 and is a result of increased borrowings by the Company's Canadian subsidiary, whose long-term debt increased \$140 million, and by the inclusion of \$81 million of long-term debt incurred by Kewanee Industries, Inc. prior to

its acquisition by the Company.

During 1977, the Company utilized short-term financing arrangements and, at December 31, 1977, outstanding short-term notes and commercial paper totaled \$151 million which represented 9.6 percent of total debt. Also, the Company increased its level of sales of customer accounts receivable to its affiliated domestic financing subsidiary (see Note 11 on page 36). Although total debt increased during 1977, the Company's debt to capitalization ratio increased by only one percentage point to 15 percent at December 31, 1977. Obligations payable in foreign currencies represented 19 and 22 percent of long-term debt at the end of 1977 and 1976, respectively.

## **Working Capital**

In 1977, cash and marketable securities decreased by \$825 million to \$1.16 billion. This balance represented 89 percent of long-term debt at year-end. The reduction in cash and marketable securities represented the first decline in these items since 1970 and the first time that cash and marketable securities were less than long-term debt since 1973. The reduction was caused primarily by the record amount of capital and exploration expenditures made by the Company in 1977.

The decrease in cash and marketable securities was accompanied by a decrease of \$208 million in noncash working capital resulting in a total decrease in working capital of \$1.03 billion, the first time that working capital has decreased since 1969.

The decrease in noncash working capital was primarily due to decreases in accounts receivable caused by the sale of receivables to the Company's affiliated domestic financing subsidiary and an increase in accounts and other short-term payables. This was offset to an extent by increases in inventories resulting from the Kewanee acquisition and an increase in both quantities and FIFO cost of Canadian petroleum inventories.

Working capital of \$955 million and \$1.99 billion at December 31, 1977 and 1976, respectively, represented approximately 10 and 20 percent of employed capital at the end of those years.

## **New Oil and Gas Accounting Standards**

The Financial Accounting Standards Board has issued a Statement which, beginning in 1979, will standardize accounting practices for the oil and gas exploration and production activities of the petroleum industry. The Statement basically adopts successful efforts accounting practices similar to those currently followed by the Company as outlined in Note 1 on page 30. However, as a result of the Statement, the Company will be required to make some changes to its existing accounting practices. The principal changes will result in capitalization of development dry hole expenses and changes in the methods of amortizing capitalized costs.

A preliminary evaluation of these changes indicates that their application would not result in any material effect on retained earnings at January 1, 1976, nor on



net income for the years ended December 31, 1977 and 1976. The Company does not believe that the adoption of the new standards will result in any change in its current dividend practices or in its ability to comply with its debt covenants.

## Expenditures

During 1977, the Company spent a record \$3.01 billion on worldwide capital and exploration projects, representing an increase of 73 percent from 1976. Total expenditures by the Company for the expansion, improvement and replacement of properties, business investments and exploration and dry hole expenses were distributed as follows:

	Millions of Dollars		% of Earnings Before Exploration Expense	
	1977	1976	1977	1976
Petroleum				
Exploration and development				
United States—Oil and gas	\$1,239	\$ 744	100%	63%
Canada—Oil and gas	214	118	17	10
Canada—Tar sands	97	99	8	8
Europe—North Sea	101	78	8	7
Other Foreign	78	65	6	6
Total	1,729	1,104	139	94
Natural gas liquids	63	38	5	3
Refining and marketing	313	227	25	19
International marine	77	90	6	7
Total Petroleum	2,182	1,459	175	123
Chemicals	174	150	14	13
Minerals	120	91	10	8
Corporate	68	26	5	2
Business investments				
Kewanee Industries, Inc.	455	—	37	—
Other	14	16	1	1
	<u>\$3,013</u>	<u>\$1,742</u>	<u>242%</u>	<u>147%</u>

## Capital Stock

The Capital Stock of Gulf is listed on the New York, Midwest and Toronto stock exchanges and, for the first time in 1977, on the Swiss stock exchanges. The New York Stock Exchange is the principal market in which the Company's Capital Stock is traded. The following table sets forth the high and low sales prices of the Company's Capital Stock during the periods indicated, as reported by *The Wall Street Journal*.

	Market Prices Per Share				
	1977	1976	1975	1974	1973
High	\$30 <sup>7</sup> / <sub>8</sub>	\$29 <sup>1</sup> / <sub>4</sub>	\$23 <sup>1</sup> / <sub>2</sub>	\$25 <sup>1</sup> / <sub>4</sub>	\$28 <sup>7</sup> / <sub>8</sub>
Low	25 <sup>7</sup> / <sub>8</sub>	20 <sup>3</sup> / <sub>8</sub>	17 <sup>5</sup> / <sub>8</sub>	16	20
Close	26 <sup>3</sup> / <sub>4</sub>	28 <sup>7</sup> / <sub>8</sub>	20 <sup>1</sup> / <sub>2</sub>	17 <sup>5</sup> / <sub>8</sub>	23 <sup>5</sup> / <sub>8</sub>
Shares traded (Thousands)	24,249	34,778	23,190	16,375	28,981

	Quarterly Stock Price Ranges and Dividends					
	1977			1976		
	High	Low	Div.	High	Low	Div.
Quarters						
First	\$30 <sup>7</sup> / <sub>8</sub>	\$27 <sup>1</sup> / <sub>2</sub>	\$.45	\$25 <sup>7</sup> / <sub>8</sub>	\$20 <sup>3</sup> / <sub>8</sub>	\$.425
Second	29 <sup>1</sup> / <sub>2</sub>	26 <sup>5</sup> / <sub>8</sub>	.45	28 <sup>3</sup> / <sub>8</sub>	23 <sup>7</sup> / <sub>8</sub>	.425
Third	30 <sup>1</sup> / <sub>8</sub>	26 <sup>5</sup> / <sub>8</sub>	.475	28 <sup>3</sup> / <sub>4</sub>	25 <sup>1</sup> / <sub>2</sub>	.425
Fourth	28 <sup>7</sup> / <sub>8</sub>	25 <sup>7</sup> / <sub>8</sub>	.475	29 <sup>1</sup> / <sub>4</sub>	24 <sup>3</sup> / <sub>8</sub>	.45

Based on cash dividends of \$1.85 per share paid in 1977, Gulf shareholders received a return of 6.5 percent on the average stock price of \$28.38 during the year. The increase in the quarterly dividend rate to 47<sup>1</sup>/<sub>2</sub> cents per share in the third quarter of 1977 brings the Company's current annual payout to \$1.90 a share.

An automatic dividend reinvestment service is available to Gulf shareholders and at year-end, 31,157 shareholders, or nine percent of the individual accounts, were participating. To take advantage of this program, write to Gulf Oil Corporation, Shareholder Records, P.O. Box 1166, Pittsburgh, Pa. 15230.

## Financial Ratios

	Year Ended December 31				
	1977	1976	1975	1974	1973
Short-term ratios:					
Cash and marketable securities to current liabilities	.28	.47	.49	.43	.44
Acid-test (a)	.89	1.17	1.12	1.14	1.32
Current assets to current liabilities	1.23	1.47	1.46	1.42	1.63
Current debt to total debt (including current portion)	.17	.11	.14	.11	.07
Capital and long-term ratios:					
Long-term debt to total capitalization (b)	.15	.14	.17	.19	.23
Net properties to long-term debt	6.37	5.68	4.82	4.10	3.40
Interest coverage (c)	7.84	8.49	7.25	9.80	6.93
Return on investment ratios:					
Income as a percent of average employed capital (d)	8.91	10.42	9.55	14.55	11.66
Net income as a percent of average shareholders' equity	10.53	12.18	11.16	18.65	15.24
Performance ratios:					
Net income as a percent of sales (e)	4.22	4.96	4.91	6.47	9.50
Sales to total assets (e)	1.25	1.22	1.15	1.32	.84

Amounts used above which are not defined elsewhere in this report are represented by the following:

- (a) Acid-test; cash, marketable securities and receivables to current liabilities
- (b) Capitalization; total of long-term debt and shareholders' equity
- (c) Interest coverage; ratio of net income and interest expense to interest expense
- (d) Income; net income and minority interest and interest expense net of tax
- (e) Sales; sales and other operating revenues less consumer excise taxes



# Consolidated Statement of Income and Retained Earnings

	Millions of Dollars Year Ended December 31	
	1977	1976
<b>REVENUES</b>		
Sales and other operating revenues .....	\$19,595	\$18,117
Interest income .....	149	189
Equity in earnings (Note 11) .....	38	40
Other revenues (Note 20) .....	47	53*
	<u>19,829</u>	<u>18,399</u>
<b>DEDUCTIONS</b>		
Purchased crude oil and products .....	10,936	10,015*
Operating expenses .....	1,534	1,400
Selling, general and administrative expenses .....	1,415	1,299
Taxes other than income taxes (Note 9) .....	2,192	2,097
Depreciation, depletion, amortization and retirements (Note 8) .....	684	631
Exploration and dry hole expenses (Note 7) .....	490	364
Department of Energy entitlements .....	232	214
Interest on long-term financing .....	110	109
Income applicable to minority interests .....	49	62
	<u>17,642</u>	<u>16,191</u>
INCOME BEFORE TAXES ON INCOME .....	<u>2,187</u>	<u>2,208</u>
<b>TAXES ON INCOME (Note 9)</b>		
United States .....	211	226
Foreign .....	1,224	1,166
	<u>1,435</u>	<u>1,392</u>
NET INCOME .....	752	816
RETAINED EARNINGS AT BEGINNING OF YEAR .....	5,800	5,320
CASH DIVIDENDS .....	(360)	(336)
RETAINED EARNINGS AT END OF YEAR .....	<u>\$ 6,192</u>	<u>\$ 5,800</u>
<b>PER—SHARE DATA</b>		
Net income .....	<u>\$ 3.86</u>	<u>\$ 4.19</u>
Cash dividends .....	<u>\$ 1.85</u>	<u>\$ 1.73</u>

\*Reclassified. See Note 26.

The notes on pages 28 to 43 are an integral part of the financial statements.



# Consolidated Statement of Financial Position

	Millions of Dollars December 31	
	<u>1977</u>	<u>1976</u>
<b>ASSETS</b>		
Current assets		
Cash and marketable securities (Note 2) . . . . .	\$ 1,164	\$ 1,989
Receivables (less allowance of \$44 and \$48 million) (Note 3) . . . . .	2,596	2,907
Inventories (Note 4) . . . . .	1,369	1,242
Prepaid expenses . . . . .	58	41
Total current assets . . . . .	<u>5,187</u>	<u>6,179</u>
Properties (less accumulated depreciation of \$6,347 and \$5,843 million) (Note 8) . . . . .	8,332	6,632
Investments in affiliated and associated companies (Note 11) . . . . .	458	308
Long-term receivables and other investments (less allowance of \$57 and \$60 million) (Note 12) . . . . .	200	288
Deferred charges . . . . .	48	42
<b>TOTAL ASSETS</b> . . . . .	<u><b>\$14,225</b></u>	<u><b>\$13,449</b></u>
<b>LIABILITIES</b>		
Current liabilities		
Accounts payable . . . . .	\$ 2,416	\$ 2,317
Notes payable and current long-term debt (Notes 13 and 14) . . . . .	264	139
Consumer sales and excise taxes payable . . . . .	135	151
Accrued United States and foreign income taxes . . . . .	469	565
Accrued rents and royalties . . . . .	108	145
Liability to nuclear partnership (Note 6) . . . . .	—	30
Other current liabilities . . . . .	840	844
Total current liabilities . . . . .	<u>4,232</u>	<u>4,191</u>
Long-term debt (Note 14) . . . . .	1,307	1,168
Deferred production payment proceeds (Note 10) . . . . .	120	123
Deferred income taxes (Note 9) . . . . .	619	483
Other long-term liabilities . . . . .	179	145
Minority interests (Note 23) . . . . .	431	397
<b>TOTAL LIABILITIES</b> . . . . .	<u><b>6,888</b></u>	<u><b>6,507</b></u>
<b>SHAREHOLDERS' EQUITY</b>		
Capital stock—authorized 300,000,000 shares, without par value; issued 211,910,826 shares stated at . . . . .	883	883
Paid-in capital . . . . .	698	698
Retained earnings . . . . .	6,192	5,800
	<u>7,773</u>	<u>7,381</u>
Less 16,942,335 and 17,046,686 shares in treasury, at cost (Note 21) . . . . .	436	439
<b>TOTAL SHAREHOLDERS' EQUITY</b> . . . . .	<u><b>7,337</b></u>	<u><b>6,942</b></u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b> . . . . .	<u><b>\$14,225</b></u>	<u><b>\$13,449</b></u>

The notes on pages 28 to 43 are an integral part of the financial statements.



# Consolidated Statement of Changes in Financial Position

	Millions of Dollars Year Ended December 31	
	1977	1976
<b>FUNDS PROVIDED BY:</b>		
Net income .....	\$ 752	\$ 816
Income charges (credits) not affecting funds:		
Depreciation, depletion, amortization and retirements .....	684	631
Income applicable to minority interests .....	49	62
Undistributed earnings of affiliates and associates .....	(17)	(32)
Deferred income taxes .....	136	114
Other credits .....	(19)	(29)
Funds from operations .....	1,585	1,562
New financing including production payment proceeds .....	233	156
Working capital acquired—Kewanee Industries, Inc. (Note 24) .....	125	—
Proceeds from sales of properties .....	79	342
Reduction of investments and long-term receivables .....	65	183
	<u>2,087</u>	<u>2,243</u>
<b>FUNDS USED FOR:</b>		
Properties and business investments .....	2,068	1,378
Acquisition of Kewanee Industries, Inc. (Note 24) .....	455	—
Dividends .....	360	336
Reduction of long-term debt and production payments .....	171	211
Increases in investments and long-term receivables .....	40	45
Investments in and advances to affiliates .....	39	—
Other—net .....	(13)	20
	<u>3,120</u>	<u>1,990</u>
INCREASE (DECREASE) IN WORKING CAPITAL .....	(1,033)	253
LESS INCREASE (DECREASE) IN NONCASH WORKING CAPITAL (Note 5) .....	(208)	101
INCREASE (DECREASE) IN CASH AND MARKETABLE SECURITIES .....	<u>\$ (825)</u>	<u>\$ 152</u>
CASH AND MARKETABLE SECURITIES AT END OF YEAR (Note 2) .....	<u>\$1,164</u>	<u>\$1,989</u>

The notes on pages 28 to 43 are an integral part of the financial statements.



# Geographic and Related Business Segment Financial Data

	Millions of Dollars					
	Operating Revenues		Segment Operating Profit (Loss)		Identifiable Assets December 31	
	1977	1976	1977	1976	1977	1976
<b>UNITED STATES</b>						
Petroleum—Exploration & production .....	<b>\$2,229</b>	\$ 1,931	<b>\$ 514</b>	\$ 516	<b>\$ 3,727</b>	\$ 2,689
—Refining & marketing .....	<b>7,486</b>	6,860	<b>208</b>	176	<b>1,725</b>	2,007
Chemicals .....	<b>869</b>	692	<b>49</b>	122	<b>1,024</b>	734
Minerals .....	<b>109</b>	92	<b>(17)</b>	(40)	<b>373</b>	288
Nuclear (equity) .....			<b>(16)</b>	(17)	<b>9</b>	—
	<b>10,693</b>	9,575	<b>738</b>	757	<b>6,858</b>	5,718
Non-operating items—Other equity companies .....			<b>2</b>	7	<b>97</b>	39
—Corporate and financial items .....			<b>(69)</b>	(44)		
—Taxes on income .....			<b>(211)</b>	(226)		
United States net income .....			<b>460</b>	494		
<b>CANADA</b>						
Petroleum—Exploration & production .....	<b>490</b>	453	<b>208</b>	219	<b>695</b>	524
—Refining & marketing .....	<b>2,237</b>	2,023	<b>43</b>	71	<b>1,420</b>	1,231
Chemicals .....	<b>141</b>	139	<b>16</b>	19	<b>95</b>	95
Minerals .....	<b>48</b>	23	<b>27</b>	6	<b>51</b>	35
	<b>2,916</b>	2,638	<b>294</b>	315	<b>2,261</b>	1,885
Non-operating items—Equity companies .....			<b>3</b>	1	<b>16</b>	11
—Minority interest .....			<b>(44)</b>	(58)		
—Corporate and financial items .....			<b>(43)</b>	(24)		
—Taxes on income .....			<b>(103)</b>	(123)		
Canada net income .....			<b>107</b>	111		
<b>EUROPE</b>						
Petroleum—Exploration & production .....	<b>3</b>	1	<b>(30)</b>	(30)	<b>168</b>	97
—Refining & marketing .....	<b>2,238</b>	2,099	<b>20</b>	(26)	<b>827</b>	802
Chemicals .....	<b>183</b>	271	<b>4</b>	35	<b>144</b>	124
	<b>2,424</b>	2,371	<b>(6)</b>	(21)	<b>1,139</b>	1,023
Non-operating items—Equity companies .....			<b>26</b>	27	<b>131</b>	113
—Corporate and financial items .....			<b>(13)</b>	(9)		
—Taxes on income .....			<b>(2)</b>	(1)		
Europe net income .....			<b>5</b>	(4)		
<b>OTHER FOREIGN</b>						
Petroleum—Total (includes international marine) ..	<b>9,825</b>	9,453	<b>1,301</b>	1,252	<b>2,179</b>	2,470
Taxes on income .....			<b>(1,119)</b>	(1,042)		
			<b>182</b>	210		
Chemicals .....	<b>95</b>	66	<b>6</b>	6	<b>87</b>	47
	<b>9,920</b>	9,519	<b>188</b>	216	<b>2,266</b>	2,517
Non-operating items—Equity companies .....			<b>23</b>	22	<b>205</b>	145
—Corporate and financial items .....			<b>(31)</b>	(23)		
Other Foreign net income .....			<b>180</b>	215		
Eliminate intergeographic and intersegment revenues	<b>(6,358)</b>	(5,986)				
Total operating revenues .....	<b>\$19,595</b>	\$18,117				
Total net income .....			<b>\$ 752</b>	\$ 816		
Corporate assets .....					<b>1,252</b>	1,998
Total assets .....					<b>\$14,225</b>	\$13,449



External and internal operating revenues distributed geographically and by business segment follow:

	Millions of Dollars					
	External Revenues (includes consumer excise taxes)		Internal Revenues*			
	1977	1976	Intergeographic		Intersegment	
			1977	1976	1977	1976
United States						
Petroleum						
Exploration & production .....	\$ 953	\$ 703	\$ 1	\$ —	\$ 1,275	\$ 1,228
Refining & marketing .....	6,946	6,394	21	36	520	444
Chemicals .....	820	667	23	14	26	12
Minerals .....	109	92	—	—	—	—
Canada						
Petroleum						
Exploration & production .....	212	190	—	—	278	263
Refining & marketing .....	2,160	1,957	—	—	77	66
Chemicals .....	126	127	—	—	15	12
Minerals .....	48	23	—	—	—	—
Europe						
Petroleum						
Exploration & production .....	3	1	—	—	—	—
Refining & marketing .....	2,084	1,864	16	21	146	234
Chemicals .....	170	192	1	—	12	79
Other Foreign						
Petroleum .....	5,872	5,842	3,951	3,611	572	568
Chemicals .....	92	65	3	1	1	—
	<u>\$19,595</u>	<u>\$18,117</u>	<u>\$ 4,016</u>	<u>\$ 3,683</u>	<u>\$ 2,922</u>	<u>\$ 2,906</u>

\*Internal revenues include \$580 and \$603 million in 1977 and 1976, respectively, which are both intergeographic and intersegment and are eliminated in arriving at the total intergeographic and intersegment revenues.

The Company is primarily an integrated petroleum company with secondary operations in the chemicals, minerals and nuclear industries. Petroleum revenues related to exploration and production are derived from crude oil, natural gas and natural gas liquids. Petroleum sales by the Company's refining and marketing operations are principally gasolines, distillates and residual fuel oils. Petroleum revenues are also obtained from the transportation of crude and product by the Company's international tanker fleet. Chemical revenues consist of petrochemicals, plastics and a variety of industrial and specialty chemicals. Mineral revenues are derived from the sale of coal and uranium. The nuclear segment is accounted for on the equity basis and, therefore, does not contribute to operating revenues.

Transfer of products between the geographic areas and segments in which the Company operates are made at prices which represent government-regulated values, or prices which the Company believes approximate market, whichever is appropriate. Internal marine transportation revenues, except for those derived from shipments to the Canadian subsidiary, are based on the average freight rate assessment (AFRA) published by the London Tanker Broker's Panel. Transportation revenues on shipments to the majority-owned Canadian subsidiary are based on a negotiated contract which provides for rates not materially less than AFRA.

Identifiable assets are those assets used in the operations of each geographic area and business segment. Identifiable assets for equity companies represent the

Company's investment in their net assets. Corporate assets principally consist of cash and marketable securities, research facilities and other assets related to the Corporate function.

Worldwide operating profit (loss) for each business segment and total non-operating items are as follows:

	Millions of Dollars	
	1977	1976
Petroleum* .....	\$1,145	\$1,136
Chemicals .....	75	182
Minerals .....	10	(34)
Nuclear (equity) .....	(18)	(19)
Non-operating items .....	(460)	(449)
Net income .....	<u>\$ 752</u>	<u>\$ 816</u>

\*Reduced by income taxes imposed by foreign oil producing countries in other foreign geographic areas.

U.S. and foreign income taxes are charged directly to the geographic area of the taxing authority.

Corporate and financial items represent the following, distributed to the geographic areas based on a three-factor formula of external revenues, operating expenses and identifiable assets, except that such items incurred by the Canadian subsidiary are charged directly to Canada:

	Millions of Dollars	
	1977	1976
Corporate items .....	\$(195)	\$(145)
Interest on long-term financing .....	(110)	(109)
Corporate interest income .....	133	143
Foreign currency adjustments on long-term debt .....	16	11
	<u>\$(156)</u>	<u>\$(100)</u>

For additional geographic and business segment information see Notes 8 and 11.



# Notes to Financial Statements

## Note 1—Summary of Accounting Policies

This summary of the major accounting policies of Gulf Oil Corporation and its consolidated subsidiaries is presented to assist the reader in evaluating the Company's financial statements. The accounting policies employed by the Company are in accordance with generally accepted accounting principles in the U.S. In those instances in which more than one generally accepted accounting principle can be applied, the Company has adopted and consistently applied in all material respects the accounting principle which it believes most accurately and fairly reflects its operating results.

### Exploration and Development Expenditures

#### *Oil and Gas*

In the petroleum industry the most significant accounting policy relates to the method of accounting for the exploration for and the development of oil and gas reserves. In this regard, the Company's capitalization policy follows the "successful effort" concept in that drilling and equipment costs are capitalized only on successful wells. All exploratory costs including successful geological and geophysical costs, annual delay rentals on undeveloped leases and all dry hole costs are charged to income as incurred. The costs of drilling discovery wells in remote frontier areas where future production is not reasonably assured are also charged to income as incurred. See page 23 in the Financial Review for a discussion of new oil and gas accounting standards.

#### *Minerals*

Exploration and development expenditures are charged to income as incurred until a project is determined to be economically feasible. Subsequent to such determination expenditures are capitalized and amortized in accordance with the Company's policy.

### Depreciation, Depletion, Amortization and Retirements

#### *Oil and Gas*

Provisions for depreciation, depletion and amortization of lease and well equipment, intangible drilling costs applicable to productive wells, and undeveloped and developed leasehold costs represent charges per unit of production based on the estimated proved developed oil and gas reserves in each country. Undeveloped leasehold costs in countries where production has not yet commenced are amortized on a straight-line basis over five years.

#### *Minerals*

Capitalized exploration and development expenditures are generally amortized when commercial production is obtained. Provisions for amortization follow the unit-of-production method.

#### *Other*

Provisions for depreciation and amortization of all other properties are generally determined on the group basis using the straight-line method based on estimated remaining economic useful lives of groups of related properties. Rates are revised when a change in life expectancy becomes apparent.

#### *Retirements, Maintenance and Repairs*

Properties retired or otherwise disposed of are eliminated from the property accounts and the amounts, after adjustment for salvage and dismantling expenses, are charged to accumulated depreciation or depletion. Only gains and losses on extraordinary retirements or retirements involving entire groups of properties are charged or credited to income.

Maintenance and repairs are charged to income, and renewals and betterments which extend the economic life of the properties are capitalized.

### Principles of Consolidation

The accounts of Gulf Oil Corporation and all subsidiary companies more than 50-percent owned are included in the consolidated financial statements except for those engaged in real estate and insurance activities, and a domestic financing subsidiary. The real estate, insurance and financing subsidiaries (affiliated companies) and all other investments 20 to 50 percent owned (associated companies) are accounted for on the equity method. See Note 11.

Intercompany transactions are eliminated in consolidation.

### Translation of Foreign Currency

Balances and transactions in foreign currencies have been translated to U.S. dollars as follows: inventories, prepaid expenses, long-term investments and properties—at rates current on dates of acquisition; deferred taxes—at the average monthly rate in the year of deferral; accumulated depreciation, depletion and amortization and related provisions against income—on the basis of dollar value of the related assets; all other assets and liabilities—at rates current at end of period; and operating income and other expenses—at average monthly rates. Gains or losses on foreign currency translation are included in results of operations in the period incurred.

### Inventory Valuation

Crude oil, petroleum products, chemicals and certain merchandise inventories generally are valued at annual average cost applied on the "last-in, first-out" (LIFO) basis, which in the aggregate is lower than market value. Inventories of the Canadian subsidiary and of certain industrial and specialty chemicals (Kewanee) generally are valued at the lower of cost applied on a "first-in, first-out" (FIFO) basis or market value. Materials and supplies are valued at average cost or less depending on the condition of the items.



## Income Taxes

The Company practices interperiod tax allocation with respect to all significant timing differences. The income tax provision is reduced by the amount of qualified investment tax credits.

## Crude Oil Transactions

In addition to its own production, the Company purchases large volumes of crude oil from other producers and sells crude oil not required for its own use. The Company records such purchases as purchase costs and such sales as revenues except that such transactions of the Company's Canadian subsidiary are excluded from both revenues and costs.

## Interest Costs

Interest costs are charged to income as incurred.

## Note 2—Cash and Marketable Securities

	Millions of Dollars	
	December 31	
	1977	1976
Cash .....	\$ 67	\$ 54
Time deposits and certificates of deposit .....	578	1,028
Marketable securities .....	519	907
	<u>\$1,164</u>	<u>\$1,989</u>
United States .....	\$ 342	\$ 821
Canada .....	248	461
Europe .....	248	262
Other Foreign .....	326	445
	<u>\$1,164</u>	<u>\$1,989</u>

Marketable securities are stated at cost, which approximates market.

## Note 3—Receivables

	Millions of Dollars	
	December 31	
	1977	1976
Customers .....	\$1,796	\$2,145
Affiliated and associated companies .....	417	344
Other receivables .....	427	466
	<u>2,640</u>	<u>2,955</u>
Allowance for doubtful accounts .....	(44)	(48)
	<u>\$2,596</u>	<u>\$2,907</u>
United States .....	\$ 606	\$ 789
Canada .....	493	457
Europe .....	370	354
Other Foreign .....	1,127	1,307
	<u>\$2,596</u>	<u>\$2,907</u>

In 1977 and 1976, provisions of \$18 and \$15 million, respectively, were credited to the allowance for doubtful accounts. Other charges and credits, principally write-offs and recoveries, were \$9 and \$3 million, respectively, in 1977 and \$15 and \$3 million, respectively, in 1976. In addition, \$16 million of the allowance for doubtful accounts was transferred to the Company's affiliated domestic financing subsidiary in 1977 in connection with the sale to it of customer receivables.

## Pensions

Pension costs, which are determined by independent actuaries, are funded as accrued. Payments to the principal fund are made in the year following accrual. Prior service costs are amortized and funded over varying periods for the different plans but generally for no more than 15 years.

## Research and Development Expenditures

Research and development expenditures are charged to income as incurred.

## Earnings Per Share

Earnings per share is calculated based upon the daily weighted average of the number of shares outstanding during the year.

## Note 4—Inventories

	Millions of Dollars	
	December 31	
	1977	1976
LIFO		
Petroleum		
United States .....	\$ 279	\$ 264
Europe .....	113	141
Other Foreign .....	74	85
Chemicals		
United States .....	74	67
Europe .....	24	30
Other Foreign .....	5	5
Merchandise .....	13	12
	<u>582</u>	<u>604</u>
FIFO		
Petroleum (Canada) .....	406	324
Chemicals .....	98	12
Merchandise .....	20	18
	<u>524</u>	<u>354</u>
Average Cost		
Materials and supplies .....	239	227
Other .....	24	57
	<u>263</u>	<u>284</u>
	<u>\$1,369</u>	<u>\$1,242</u>
United States .....	\$ 571	\$ 486
Canada .....	466	384
Europe .....	162	197
Other Foreign .....	170	175
	<u>\$1,369</u>	<u>\$1,242</u>

Quantity decreases in certain LIFO pools increased earnings by \$54 and \$14 million, after considering taxes, in 1977 and 1976, respectively. LIFO inventories were \$1.19 and \$1.14 billion less than current cost at December 31, 1977 and 1976, respectively.

Materials and supplies, and certain taxes on products carried in inventory, are not included in the computation of cost of sales. The inventory amounts included in purchase costs used in the computation of cost of sales were \$1.13 and \$1.01 billion and \$873 million at December 31, 1977, 1976 and 1975, respectively.



## Note 5—Increase (Decrease) in Noncash Working Capital

An analysis of changes in noncash working capital as reported in the Consolidated Statement of Changes in Financial Position is as follows:

	Millions of Dollars	
	1977	1976
Increase (decrease) in noncash current assets		
Receivables .....	<u>\$ (311)</u>	\$ 551
Inventories .....	<u>127</u>	99
Prepaid expenses .....	<u>17</u>	(96)
	<u>(167)</u>	554
(Increase) decrease in current liabilities		
Accounts payable .....	(99)	(560)
Notes payable and current long-term debt.	(125)	78
Accrued income taxes .....	96	53
Liability to nuclear partnership .....	30	108
Other current liabilities .....	<u>57</u>	(132)
	<u>(41)</u>	(453)
Increase (decrease) in noncash working capital .....	<u>\$ (208)</u>	<u>\$ 101</u>

## Note 6—Nuclear Partnership

The Company and Scallop Nuclear Inc., a Royal Dutch/Shell Group Company, own and operate General Atomic Company, a 50-50 partnership engaged in the nuclear business. The partnership agreement provides that the capital requirements of the partnership will be contributed equally by the partners.

The investment in this partnership is accounted for on an equity basis. The Company's net investment is equal to its original contribution to the partnership plus subsequent advances less its share of losses. At December 31, 1977, the Company's investment exceeded its share of losses by \$4 million and is included in Investments in Affiliated and Associated Companies. At December 31, 1976, the Company's share of cumulative losses exceeded its investment by \$30 million and was shown as a liability to the nuclear partnership. This investment is summarized below:

	Millions of Dollars	
	December 31	
	1977	1976
Current assets .....	<u>\$16</u>	\$ 15
Investment in AGNS .....	<u>54</u>	52
Net properties .....	<u>19</u>	22
Total assets .....	<u>89</u>	89
Current liabilities .....	<u>20</u>	22
Provision for future losses .....	<u>65</u>	97
Total liabilities .....	<u>85</u>	119
Net investment (liability) .....	<u>\$ 4</u>	<u>\$ (30)</u>

Changes in the Company's investment during the years ended December 31, 1977 and 1976 are summarized as follows:

	Millions of Dollars	
	1977	1976
Net investment (liability) January 1 .....	<u>\$ (30)</u>	<u>\$ (138)</u>
Operating losses—U.S. ....	(16)	(17)
—Foreign .....	(2)	(2)
Additional investments .....	<u>52</u>	127
Net investment (liability) December 31 ....	<u>\$ 4</u>	<u>\$ (30)</u>

In prior years, provisions of \$240 million were made for the Company's 50-percent share of anticipated future losses on certain commitments of the partnership. The Company's share of losses realized and charged to this provision were \$32 and \$44 million in the years 1977 and 1976, respectively.

Efforts are continuing toward resolving the prolonged mechanical and regulatory problems which have prevented commercial operation of the Fort St. Vrain plant that was constructed for and is currently being tested for acceptance by the Public Service Company of Colorado. It was expected that commercial operations of the plant would begin in 1977; however, the Nuclear Regulatory Commission (NRC) has not yet issued its approval for the plant to exceed 70 percent power capacity. While the plant has operated for brief intervals at levels up to 68 percent of power, recent unfavorable operating developments have required the plant to be shut down at times and have made it difficult to predict when the plant will be operating at full power capacity. The loss provision related to the Fort St. Vrain plant is considered to be adequate so long as additional mechanical or regulatory matters do not cause substantial delay.

In connection with its nuclear business, General Atomic entered into arrangements for the purchase of uranium for use in satisfying nuclear fuel commitments to electric utilities. At present, it has contractual arrangements with several uranium suppliers for the purchase of approximately 39 million pounds of uranium and with several electric utilities for the sale of approximately 25 million pounds of uranium. Since 1974, a number of complex and interrelated disputes have arisen involving these arrangements and have led to litigation and arbitration proceedings.

Litigation with certain suppliers, involving approximately 30 million pounds of uranium, places in issue the enforceability of those purchase contracts and prices under them. If the suppliers in such litigation were held to be relieved of their contractual obligations to General Atomic, such result may or may not relieve General Atomic of its disputed commitments to the electric utilities. The average sales price of the uranium deliverable to the electric utilities under the sales commitments is approximately \$14 per pound. The average purchase price of uranium under the commitments with the uranium suppliers is approximately \$13 per pound. Prices for uranium in the open market have recently been in the \$42 to \$45 per pound range. Certain allegations in the litigation with uranium suppliers relate to the period prior to the formation of General Atomic when its business was wholly owned by Gulf Oil Corporation.

Three lawsuits with uranium suppliers are pending. The principal one, brought by United Nuclear Corporation on December 31, 1975 in the Santa Fe District Court, State of New Mexico, is currently in the trial stage. United Nuclear is seeking to be excused from performance under contracts to supply approximately



22 million pounds of uranium allegedly on grounds of fraud, violation of New Mexico antitrust laws, commercial impracticability and mutual mistake and, alternatively, is asking to limit its damages for its failure to perform under the contracts. United Nuclear has particularly claimed that General Atomic has been involved in a foreign uranium marketing arrangement or "cartel," which is discussed further in Note 16. General Atomic has counterclaimed against United Nuclear for \$2.3 billion for alleged breach of supply contracts and violations of New Mexico antitrust laws. United Nuclear's reply asserted a claim for damages in like amount.

The other two suits with uranium suppliers are also pending in New Mexico. One was instituted by General Atomic on February 10, 1976 in the State District Court in Albuquerque against Ranchers Exploration and Development Corporation and HNG Oil Company and seeks a declaration of the validity of the supply contract. The suppliers in this suit have asserted defenses and counterclaims based on alleged violations of state antitrust laws, commercial impracticability and limitation of liability. Trial has been scheduled for May 1978. The second, brought by Reserve Oil & Minerals Corporation and Sohio Petroleum Company in the United States District Court for New Mexico on September 22, 1977, essentially seeks rescission of a supply contract allegedly on the grounds of fraud and violations of federal and state antitrust laws. General Atomic has filed a counterclaim seeking \$230 million in actual damages and \$230 million in punitive damages for breach of contract. This proceeding is in the discovery stage.

General Atomic's commitments (or alleged commitments) to supply approximately 15 million pounds of uranium to four electric utilities are in dispute. In December 1977, General Atomic settled its dispute with a fifth utility by agreeing to sell to the utility a reduced quantity of uranium at an increased price. Two of the pending disputes are with Indiana & Michigan Electric Company and The Detroit Edison Company, which have been joined in the United Nuclear suit. In this suit, General Atomic is seeking a determination that, if United Nuclear is excused on certain grounds from performing under its contracts to supply uranium to General Atomic, then General Atomic is excused from performance under its contracts to sell approximately six million pounds of uranium to these utilities. The two utilities have asserted breach of contract claims against General Atomic seeking specific performance or actual damages of \$284 million and punitive damages of \$568 million in the aggregate. Indiana & Michigan has also alleged that General Atomic has violated New Mexico antitrust laws.

In proceedings involving the pending disputes with the other two electric utilities, General Atomic is seeking determinations that it has no binding commitments to deliver approximately nine million pounds of uranium

to such utilities. One of these, an arbitration proceeding involving Commonwealth Edison Company (in which United Nuclear is also a party), commenced in Chicago, Illinois on October 29, 1974. The other proceeding was commenced by Pennsylvania Power and Light Company on November 6, 1974 in the Court of Common Pleas, Lehigh County, Pennsylvania. Both the arbitration proceeding and the Lehigh County suit are in the discovery stage.

The Company understands that General Atomic is close to reaching an agreement to resolve its dispute with one of the four electric utilities.

The Company, based upon opinions of counsel (including independent counsel), believes that General Atomic has relevant and meritorious defenses to the allegations and the issues raised by both the uranium suppliers and the electric utilities and, therefore, believes that General Atomic ought to prevail in this uranium litigation. In addition, the Company continues to believe that resolution of these proceedings taken as a whole will not result in a material loss to the Company and, accordingly, no provision for loss has been made. See also Note 16.

Allied-General Nuclear Services (AGNS), a partnership of General Atomic and Allied Chemical Nuclear Products, Inc., has built a facility at Barnwell, South Carolina, to recover uranium and plutonium from the spent fuel of nuclear reactors. The Company's share of the investment in AGNS is \$54 million. The viability of this plant and performance under related fuel reprocessing agreements depends upon the resolution of several uncertainties, including licensing problems, nuclear proliferation issues, government funding and certain other matters subject to government regulation.

On April 7, 1977, President Carter stated that the commercial reprocessing of spent nuclear fuel would be indefinitely deferred and on December 23, 1977, the NRC terminated a generic environmental hearing on the recycling of plutonium, terminated a pending plutonium recycle-related licensing procedure involving the Barnwell facility, and withdrew its Policy Statement to consider the interim licensing of plutonium recycle-related facilities such as Barnwell. It is the Company's view that commercial reprocessing by private companies will not be permitted in the United States in the foreseeable future, and that, for this reason among others, AGNS is excused from performing existing contracts for reprocessing services.

While the decisions of the President and the NRC have adversely affected prospects for commercial operation of the Barnwell facility and could jeopardize the Company's investment therein, the Company continues to believe that the use of Barnwell will be of important assistance in the ultimate solution of the handling of spent nuclear fuel resulting from the operation of nuclear reactors. Accordingly, the Company has made no provision for loss on its share of General Atomic's investment in AGNS.



## Note 7—Exploration and Development Expenditures

	Millions of Dollars							
	Expenditures				Depreciation Etc. Charged to Income		Net Capitalized Expenditures December 31	
	Charged to Income		Capitalized					
	1977	1976	1977	1976	1977	1976	1977	1976
United States								
Oil and gas .....	\$272	\$204	\$ 967	\$540	\$328	\$252	\$3,169	\$2,250
Coal .....	—	1	43	41	8	7	185	151
Uranium .....	22	12	42	26	1	1	139	98
Oil shale .....	4	4	—	—	—	23	2	2
	<u>298</u>	<u>221</u>	<u>1,052</u>	<u>607</u>	<u>337</u>	<u>283</u>	<u>3,495</u>	<u>2,501</u>
Canada								
Oil and gas .....	106	74	108	44	19	18	251	167
Tar sands .....	1	—	96	99	5	—	272	181
Uranium .....	6	4	3	3	3	3	25	27
	<u>113</u>	<u>78</u>	<u>207</u>	<u>146</u>	<u>27</u>	<u>21</u>	<u>548</u>	<u>375</u>
Europe—North Sea—Oil and gas .....	33	28	68	50	1	1	153	84
Other Foreign—Oil and gas .....	46	37	32	28	30	47	114	111
	<u>\$490</u>	<u>\$364</u>	<u>\$1,359</u>	<u>\$831</u>	<u>\$395</u>	<u>\$352</u>	<u>\$4,310</u>	<u>\$3,071</u>

Of the net capitalized expenditures, \$1,386 and \$806 million relate to recently acquired leases and undeveloped properties at December 31, 1977 and 1976, respectively. These costs are being amortized in accordance with the Company's policy as described in Note 1.

In the computation of unit-of-production amortization, only those reserves classified as proved developed are used. Item 3 of Form 10-K on pages 57 and 58 describes the Company's method of classifying reserves and provides additional information with regard to the Company's proved developed oil and gas reserves.

## Note 8—Properties

	Millions of Dollars							
	December 31				Year			
	Gross Investment at Cost		Net Investment		Depreciation Etc. Charged to Income		Expenditures Capitalized	
	1977	1976	1977	1976	1977	1976	1977	1976
United States								
Petroleum—Exploration and development .....	\$ 6,041	\$ 4,846	\$3,169	\$2,250	\$ 328	\$ 252	\$ 967	\$ 540
—Natural gas liquids .....	313	262	150	107	10	11	54	24
—Refining and marketing .....	2,389	2,356	1,156	1,165	92	96	120	95
Chemicals .....	1,056	813	789	582	42	27	161	142
Minerals .....	466	391	326	251	9	31	85	67
Corporate .....	212	138	143	77	12	8	67	26
	<u>10,477</u>	<u>8,806</u>	<u>5,733</u>	<u>4,432</u>	<u>493</u>	<u>425</u>	<u>1,454</u>	<u>894</u>
Canada								
Petroleum—Exploration and development .....	767	570	523	348	24	18	204	143
—Natural gas liquids .....	173	164	94	95	10	10	9	14
—Refining and marketing .....	1,053	918	609	504	43	43	154	112
Chemicals .....	103	114	40	43	6	4	2	3
Minerals .....	33	30	25	27	3	3	3	3
	<u>2,129</u>	<u>1,796</u>	<u>1,291</u>	<u>1,017</u>	<u>86</u>	<u>78</u>	<u>372</u>	<u>275</u>
Europe								
Petroleum—Exploration and development .....	158	87	153	84	1	1	68	50
—Refining and marketing .....	655	639	379	382	30	31	34	17
Chemicals .....	123	107	80	71	7	7	8	3
Corporate .....	8	15	4	10	1	—	1	—
	<u>944</u>	<u>848</u>	<u>616</u>	<u>547</u>	<u>39</u>	<u>39</u>	<u>111</u>	<u>70</u>
Other Foreign								
Petroleum—Exploration and development .....	292	263	114	111	30	47	32	28
—Refining and marketing .....	102	95	56	50	4	11	5	3
—International marine .....	704	647	502	463	30	30	77	90
Chemicals .....	31	20	20	12	2	1	3	2
	<u>1,129</u>	<u>1,025</u>	<u>692</u>	<u>636</u>	<u>66</u>	<u>89</u>	<u>117</u>	<u>123</u>
	<u>\$14,679</u>	<u>\$12,475</u>	<u>\$8,332</u>	<u>\$6,632</u>	<u>\$ 684</u>	<u>\$ 631</u>	<u>\$2,054</u>	<u>\$1,362</u>



## Note 9—Taxes

	Millions of Dollars					
	Total		United States		Foreign	
	1977	1976	1977	1976	1977	1976
Income taxes						
Current	\$1,313	\$1,370	\$ 143	\$ 238	\$1,170	\$1,132
Investment tax credits—current	(14)	(92)	(4)	(83)	(10)	(9)
—deferred	(52)	—	(52)	—	—	—
Other deferred taxes	188	114	124	71	64	43
Total income taxes	<u>1,435</u>	<u>1,392</u>	<u>211</u>	<u>226</u>	<u>1,224</u>	<u>1,166</u>
Taxes other than income						
Consumer excise	1,755	1,666	779	788	976	878
Ad valorem	174	166	143	131	31	35
Sales and use	111	102	19	13	92	89
Import duties	115	96	16	5	99	91
Other	37	67	14	44	23	23
Total taxes other than income	<u>2,192</u>	<u>2,097</u>	<u>971</u>	<u>981</u>	<u>1,221</u>	<u>1,116</u>
Total taxes	<u>\$3,627</u>	<u>\$3,489</u>	<u>\$1,182</u>	<u>\$1,207</u>	<u>\$2,445</u>	<u>\$2,282</u>

Deferred taxes relating to significant timing differences have been provided as follows:

	Millions of Dollars					
	Total		United States		Foreign	
	1977	1976	1977	1976	1977	1976
Intangible drilling and development costs	\$116	\$ 40	\$111	\$ 38	\$ 5	\$ 2
Depreciation	88	75	39	39	49	36
Investment tax credits	(52)	—	(52)	—	—	—
Other	(16)	(1)	(26)	(6)	10	5
Total deferred taxes	<u>\$136</u>	<u>\$114</u>	<u>\$ 72</u>	<u>\$ 71</u>	<u>\$ 64</u>	<u>\$ 43</u>

The Company's federal tax liabilities for all years prior to 1971 have been settled and paid. The Company believes that adequate provision has been made for income taxes which may become payable in settlement of open tax years.

No deferred taxes have been recognized for the Company's share of the undistributed foreign earnings of certain subsidiaries, which were \$790 million at December 31, 1977, since these earnings are considered to be permanently reinvested.

Total income tax expense was \$1,435 and \$1,392 million, which equates to an effective tax rate of 66 percent and 63 percent, on pretax earnings for 1977 and 1976, respectively. The following schedule reconciles the difference between the United States statutory tax rate and the effective rate:

	1977		1976	
	Amount in Millions	% of Pretax Income	Amount in Millions	% of Pretax Income
United States statutory tax rate	\$1,050	48%	\$1,060	48%
Increase (decrease) resulting from:				
Foreign taxes at rates in excess of the U.S. tax rate on foreign source income subject to U.S. tax	243	11	230	10
Allowable depletion in excess of cost depletion	(12)	—	(19)	(1)
Foreign taxes on foreign source income not subject to U.S. tax	222	10	170	8
Investment tax credits	(66)	(3)	(92)	(4)
Other	(2)	—	43	2
	<u>\$1,435</u>	<u>66%</u>	<u>\$1,392</u>	<u>63%</u>

## Note 10—Deferred Production Payment Proceeds

In 1975, the Company entered into two agreements (production payments) for the sale of economic interests in future production. Under these agreements, the Company received total proceeds of \$167 million, which is being used principally for the development of oil and gas fields in the Gulf of Mexico and expansion of a coal mine in New Mexico.

Under the terms of the agreements, the Company has dedicated percentages of production revenues for the repayment of the purchase amounts and for interest on the purchasers' financing arrangements. Repayment of the production payments is being made solely out of the revenues derived from recovered hydrocarbons or minerals produced from the properties.

Production and the repayment of the production payment from the oil and gas fields began in 1976 and is expected to begin during 1979 for the New Mexico coal mine. Changes during the years ended December 31, 1977 and 1976 are summarized as follows:

	Millions of Dollars	
	1977	1976
Balance, January 1	\$123	\$ 57
Proceeds received	33	78
Interest charged to expense	10	7
Repayments	(46)	(19)
Balance, December 31	<u>\$120</u>	<u>\$123</u>



## Note 11—Investments in Affiliated and Associated Companies

The Company's investments in affiliated and associated companies were \$458 and \$308 million at December 31, 1977 and 1976, respectively. These amounts, including the 1976 liability to the nuclear partnership of \$30 million (see Note 6), are summarized as follows:

	Millions of Dollars					
	December 31					
	1977			1976		
	Total	Affiliated	Associated	Total	Affiliated	Associated
Current assets .....	\$1,060	\$455	\$ 605	\$ 602	\$ 66	\$ 536
Properties .....	616	65	551	563	66	497
Other assets .....	216	111	105	126	8	118
Total assets .....	<u>1,892</u>	<u>631</u>	<u>1,261</u>	<u>1,291</u>	<u>140</u>	<u>1,151</u>
Current liabilities .....	841	369	472	462	40	422
Long-term debt .....	473	138	335	402	82	320
Other long-term liabilities .....	225	12	213	256	6	250
Total liabilities .....	<u>1,539</u>	<u>519</u>	<u>1,020</u>	<u>1,120</u>	<u>128</u>	<u>992</u>
Net assets .....	353	112	241	171	12	159
Advances .....	105	18	87	107	23	84
	<u>\$ 458</u>	<u>\$130</u>	<u>\$ 328</u>	<u>\$ 278</u>	<u>\$ 35</u>	<u>\$ 243</u>
United States—Petroleum .....	\$ (8)	\$ —	\$ (8)	\$ (8)	\$ —	\$ (8)
—Chemicals .....	11	—	11	12	—	12
—Minerals .....	26	—	26	—	—	—
—Nuclear .....	9	—	9	(28)	—	(28)
—Corporate .....	68	68	—	35	35	—
Canada—Petroleum .....	13	—	13	11	—	11
—Corporate .....	3	—	3	—	—	—
Europe—Petroleum .....	126	—	126	102	—	102
—Chemicals .....	10	—	10	11	—	11
—Nuclear .....	(5)	—	(5)	(2)	—	(2)
Other Foreign—Petroleum .....	85	—	85	92	—	92
—Chemicals .....	57	—	57	53	—	53
—Corporate .....	63	62	1	—	—	—
	<u>\$ 458</u>	<u>\$130</u>	<u>\$ 328</u>	<u>\$ 278</u>	<u>\$ 35</u>	<u>\$ 243</u>

The Company's equity in earnings (losses) of these companies is summarized as follows:

	Millions of Dollars					
	1977			1976		
	Total	Affiliated	Associated	Total	Affiliated	Associated
Revenues .....	\$2,255	\$111	\$2,144	\$1,966	\$ 49	\$1,917
Less:						
Purchases and operating expenses .....	2,021	45	1,976	1,761	29	1,732
Selling and administrative expenses .....	166	58	108	132	20	112
Taxes .....	30	—	30	33	—	33
	<u>2,217</u>	<u>103</u>	<u>2,114</u>	<u>1,926</u>	<u>49</u>	<u>1,877</u>
Equity in earnings .....	<u>\$ 38</u>	<u>\$ 8</u>	<u>\$ 30</u>	<u>\$ 40</u>	<u>\$ —</u>	<u>\$ 40</u>
United States—Petroleum .....	\$ 8	\$ —	\$ 8	\$ 7	\$ —	\$ 7
—Nuclear .....	(16)	—	(16)	(17)	—	(17)
—Corporate .....	(6)	(6)	—	—	—	—
Canada—Petroleum .....	3	—	3	1	—	1
Europe—Petroleum .....	28	—	28	29	—	29
—Nuclear .....	(2)	—	(2)	(2)	—	(2)
Other Foreign—Petroleum .....	(1)	—	(1)	12	—	12
—Chemicals .....	10	—	10	10	—	10
—Corporate .....	14	14	—	—	—	—
	<u>\$ 38</u>	<u>\$ 8</u>	<u>\$ 30</u>	<u>\$ 40</u>	<u>\$ —</u>	<u>\$ 40</u>
Cash dividends received .....	<u>\$ 39</u>	<u>\$ 10</u>	<u>\$ 29</u>	<u>\$ 26</u>	<u>\$ —</u>	<u>\$ 26</u>



During 1977 current liabilities of the Company's affiliated domestic financing subsidiary increased significantly due to its sale of short-term commercial paper, the proceeds of which were used in purchasing customer accounts receivable from the Company. Prior to October 1, 1977, the Company's investment in its affiliated foreign insurance subsidiary was included in the financial statements on a consolidated basis. Inclusion of this investment on an equity basis subsequent to that date is principally responsible for the increase in other assets of affiliates at December 31, 1977 and represents the subsidiary's investment portfolio.

In 1977 the Company decided to divest its interest in the affiliated real estate subsidiaries. The Company does not expect the divestment to have a significant effect upon its earnings or financial position.

As of December 31, 1977, the Company was contingently liable for guarantees of debt of associated companies in the amount of \$46 million.

## Note 12—Long-Term Receivables and Other Investments

	Millions of Dollars	
	December 31	
	1977	1976
Long-term receivables .....	\$ 233	\$ 277
Other investments (at cost) .....	24	71
	<u>257</u>	<u>348</u>
Allowance for doubtful accounts .....	(57)	(60)
	<u>\$ 200</u>	<u>\$ 288</u>
United States .....	\$ 25	\$ 33
Canada .....	32	36
Europe .....	37	113
Other Foreign .....	106	106
	<u>\$ 200</u>	<u>\$ 288</u>

In 1976 a provision of \$4 million was credited to the allowance for doubtful accounts. Charges, principally write-offs, were \$3 million in 1977 and \$2 million in 1976.

## Note 13—Short-Term Debt

Short-term notes payable at December 31, 1977 and 1976 were \$151 million (including \$50 million of the Company's commercial paper due February 1978) and \$35 million, respectively, and the related weighted average interest rates were 8.48 and 8.94 percent, respectively. The average aggregate short-term notes payable outstanding during 1977 and 1976 were \$80 and \$27 million, respectively. The weighted average interest rates for all such short-term notes payable were 7.28 and 10.03 percent in 1977 and 1976, respectively. The maximum aggregate amount outstanding at any month-end in 1977 and 1976 was \$167 and \$51

million, respectively.

At December 31, 1977, the Company had available approximately \$490 million in unused lines of credit from banks. These lines are generally without compensating balance requirements or fees and can be withdrawn at the option of the bank after giving notice to the Company. The Company's Canadian subsidiary has additional lines of \$114 million for which it pays fees, at prevailing market rates, on the unused portion of the line. Borrowings under any of these lines of credit would generally bear interest at prime commercial lending rates.

## Note 14—Long-Term Debt

	Millions of Dollars	
	December 31	
	1977	1976
United States dollars		
8½% sinking fund debentures due in 1995 .....	\$ 200	\$ 200
6½% sinking fund debentures due in 1993 .....	191	200
7 to 9% debentures due 1978 through 1987 .....	135	147
3¼ to 6% notes payable 1978 through 1990 .....	126	139
8½% notes payable 1997 .....	125	—
3¾ to 5.3% bonds due 1978 through 1997 .....	74	84
5.35% sinking fund debentures due in 1991 .....	68	73
7¼ and 8½% notes payable 1978 and 1981 .....	39	47
9½% Kewanee debentures due 1981 through 2000 .....	45	—
7½% Kewanee sinking fund debentures due 1979 through 1997 .....	20	—
Other obligations (including \$18 million of Kewanee) .....	130	102
	<u>1,153</u>	<u>992</u>
Foreign currencies		
Canadian dollars—5¼ to 8½% payable 1978 through 1990 .....	184	169
Swiss francs—6½ and 6¾% payable 1978 and 1985 .....	31	26
Italian lire—4% above Italian discount rate payable 1978 through 1985 .....	29	32
German marks—7½% payable 1978 through 1986 .....	—	42
Other currencies (including \$3 million of Kewanee) .....	23	11
	<u>1,420</u>	<u>1,272</u>
Included in current liabilities .....	<u>113</u>	<u>104</u>
	<u>\$1,307</u>	<u>\$1,168</u>

Approximate maturities in the years 1979 through 1982 are \$96, \$88, \$123 and \$85 million, respectively.



## Note 15—Pension Plans

The Company has various pension plans covering substantially all of its employees. The provisions for the cost of these pension plans charged to income for the years 1977 and 1976 were \$110 and \$136 million, respectively. At December 31, 1977, unamortized prior service costs of all the various pension plans aggregated approximately \$466 million.

The Company's principal plan, the Gulf Pension Plan, covers the majority of its U.S. employees. In 1977, on the recommendation of the Plan's Enrolled Actuary, the actuarial assumptions of the Gulf Pension Plan were revised to reflect more realistic rates of inflation and investment return used in actuarial valuations. The effect of these revisions was to decrease projected 1977 pension expense by \$29 million, which, after considering related tax charges of \$14 million, increased 1977 net income by \$15 million. As a result of these revisions, prior service costs were restated, increasing such costs by \$114 million. The restated prior service costs are being amortized over 15 years from January 1, 1977.

A summary of changes in the fund investments, including receivables from the Company, for this Plan during 1977 and 1976 follows:

	Millions of Dollars	
	Year Ended December 31	
	1977	1976
Investments at January 1, at cost .....	\$800	\$687
Company contributions .....	86	115
Fund income .....	37	45
Benefits paid .....	(60)	(47)
Investments at December 31, at cost .....	<u>\$863</u>	<u>\$800</u>
Market value at December 31 .....	<u>\$868</u>	<u>\$866</u>

Based on the most recent actuarial valuation of the Gulf Pension Plan, the actuarially computed value of vested benefits exceeded the market value of plan assets and balance sheet accruals at December 31, 1977 by approximately \$40 million. The actuarially computed value of vested benefits under the pension plan of the Company's majority-owned Canadian subsidiary exceeded that plan's assets by approximately \$50 million at December 31, 1977.

## Note 16—Uranium Litigation

On October 15, 1976, Westinghouse Electric Corporation filed a complaint in the United States District Court for the Northern District of Illinois against the Company and 28 other uranium producers, including a subsidiary of the Company. The complaint alleges that the defendants have fixed and increased prices and other terms of uranium sales, have allocated the market and have refused to deal with certain uranium purchasers, including plaintiff, in violation of federal

antitrust laws. Plaintiff seeks injunctive relief plus treble damages in an unspecified amount. All discovery and other proceedings have been stayed by the court pending a ruling on motions filed by the Company and certain other defendants to disqualify counsel for plaintiff or, in the alternative, to dismiss the suit. Because of the stay, neither the Company nor its subsidiary has answered the complaint.

On November 18, 1977, the Tennessee Valley Authority brought suit against eight companies engaged in the production or marketing of uranium, including the Company and one of its subsidiaries. The complaint filed in the United States District Court for the Eastern District of Tennessee alleges that the defendants have combined and conspired to fix the price of uranium in violation of federal antitrust laws and have violated the Tennessee Valley Authority Act. Plaintiff seeks treble damages in an unspecified amount, plus injunctive relief. The Company and its subsidiary have been granted an extension of time to answer the complaint. To date there have been no discovery proceedings.

Both Westinghouse and TVA have specifically charged that the Company's involvement with a foreign uranium marketing arrangement or "cartel" had a substantial effect in increasing the price of uranium, and that those plaintiffs may sustain substantial damages as a result of the alleged marketing arrangement. Such charge is also involved in certain issues in the United Nuclear lawsuit described in Note 6. The Company denies such assertion. Its position is that its Canadian subsidiary was required by the Canadian government to participate in the foreign uranium marketing arrangement. The Company further denies that such involvement had any substantial effect in increasing the price of uranium or otherwise constituted a violation of antitrust laws.

Certain litigation and arbitration proceedings involving the uranium contracts of General Atomic, of which the Company is a 50 percent partner, are described in Note 6.

The Company, based upon opinions of counsel (including independent counsel), believes that it has relevant and meritorious defenses to the allegations made by both Westinghouse and TVA. The Company further believes that the resolution of the uranium litigation with Westinghouse and TVA will not result in a material loss to the Company and, accordingly, no provision for loss has been made.

In addition to the litigation described above, there are certain investigations of the uranium industry being conducted by the Sub-Committee on Oversight and Investigations of the Committee on International and Foreign Commerce, House of Representatives; the New York State Assembly Standing Committee on Corporations, Authorities and Commissions; and a Federal Grand Jury sitting in Washington, D.C. regarding uranium matters. The Company has furnished documents and witnesses with respect to these investigations.



## Note 17—Contingent Liabilities

On July 18, 1973, the Federal Trade Commission issued a complaint against the Company and seven other major petroleum companies charging violation of Section 5 of the Federal Trade Commission Act and alleging a combination or agreement to monopolize crude oil refining. The complaint states no specific relief, but the FTC may ask for divestiture of certain of the Company's operations. This proceeding to date has dealt mostly with discovery matters, particularly the scope of the FTC's subpoenas.

Seven states have brought class actions against the Company and a number of other major oil companies in federal district courts. These actions have been instituted by Florida (July 9, 1973), Connecticut (July 25, 1973), Kansas (October 8, 1974), California (June 25, 1975), Arizona (July 22, 1976), Oregon (February 10, 1977) and Washington (August 15, 1977). They allege, among other things, that the defendants combined and conspired to restrain trade in the exploration, production, transportation and sale of crude oil and in the refining, distribution and marketing of petroleum products in violation of federal and state antitrust laws. These suits seek treble damages in unspecified amounts and injunctive relief, including divestiture of crude oil exploration and production activities. The actions have been consolidated for pre-trial proceedings in the United States District Court for the Central District of California. Proceedings involving amended pleadings, discovery and pre-trial motions are under way.

On December 4, 1974, a complaint was filed in the United States District Court for the Southern District of New York in Samuel J. Lefrak, et al. v. Arabian American Oil Company, et al. against the Company and other petroleum companies alleging a conspiracy to fix and maintain prices of crude oil and petroleum products, especially home heating oil, in violation of federal and New York antitrust laws. The allegations are similar to those in six other suits since filed in the same court: Brompton Associates Company, et al. v. Arabian American Oil Company, et al.; Harry B. Helmsley, et al. v. Arabian American Oil Company, et al.; Doris Kaskel, et al. v. Arabian American Oil Company, et al.; The New York City Housing Authority v. Arabian American Oil Company, et al.; Rochdale Village, Inc. v. Arabian American Oil Company, et al.; and Rose Associates, Inc., et al. v. Arabian American Oil Company, et al. The seven suits combined seek compensatory damages of approximately \$94 million (before trebling), punitive damages of approximately \$545 million and injunctive relief.

On April 27, 1977, the Department of Energy issued a Notice of Proposed Disallowance (NOPD) proposing to

disallow approximately \$80 million of landed costs of the Company's imported crude oil. Three previous notices proposing disallowances of approximately \$88 million were rescinded and the NOPD substantially duplicated a Notice of Probable Violation issued in 1974. The Company filed for an administrative review of the NOPD, submitted an offer of settlement in late 1977 of approximately \$16 million and is attempting to resolve certain disputed matters.

On March 3, 1975, a suit was filed by Nelson Bunker Hunt (subsequently joined by W. Herbert Hunt and Lamar Hunt) in the United States District Court, Southern District of New York against the Company and other oil producers. Plaintiffs allege that defendants have combined and conspired in unreasonable restraint of trade and commerce in violation of the Sherman Act and the Wilson Tariff Act and that defendants had an unlawful agreement to divide markets and to refuse crude oil to plaintiffs. Damages of \$125 million (before trebling) and at least \$90 million for breach of contract are claimed. In December 1977, the United States Supreme Court denied plaintiffs' petition for a writ of certiorari with respect to the affirmance by the Court of Appeals of the District Court's dismissal of plaintiffs' third antitrust claim that defendants conspired to prevent plaintiffs from reaching agreement with the Libyan Government. The District Court has set the case for trial in March 1978.

The Company believes that none of the items described above will have a material adverse effect on the net assets or future earnings of the Company except that, with regard to the FTC complaint, the Company is still unable to determine what effect, if any, this proceeding will have on future earnings of the Company.

The Company is also a party to other administrative proceedings brought by governmental authorities pursuant to federal, state or local environmental protection laws or regulations which allege violations of such laws and seek injunctive relief or civil penalties. The Company does not believe that these proceedings are, in the aggregate, material to its operations or net assets and does not foresee any material loss or interruption of its operations as a result of any alleged violation of environmental laws or regulations.

See Form 10-K Item 5 on page 61 for information regarding certain shareholder derivative actions and for additional information with respect to alleged violations of environmental protection laws.

The Company was contingently liable for guarantees of loans payable by owners of service stations and others in the amount of \$127 million, and also for loans payable by associated companies as described in Note 11.



#### **Note 18—Gas Sales Contract**

On September 7, 1977, the United States Court of Appeals for the Third Circuit affirmed without modification the order of the Federal Power Commission (now the Federal Energy Regulatory Commission) determining that the Company failed to comply with its contract dated January 4, 1964 with Texas Eastern Transmission Corporation with respect to deliveries of natural gas. A petition for writ of certiorari filed by the Company with the United States Supreme Court was denied on February 21, 1978 but the Company intends to file a motion for rehearing.

The contract provides for the delivery of gas over a 26-year period or until 4.4 trillion cubic feet have been delivered, whichever first occurs, at prices of 19 cents per thousand cubic feet (mcf) for the first 10 years, 21 cents per mcf for the next 10 years and 22 cents per mcf thereafter. The contract prices are significantly below current area market prices. It further provides for delivery of a daily quantity of 500 million cubic feet (mmcf), with an option for Texas Eastern to take up to 625 mmcf per day. Although average deliveries were less than 500 mmcf per day during recent years, the Company has maintained average deliveries of 592 mmcf per day during 1977.

The FPC ordered that the Company was obligated to pay refunds to Texas Eastern in accordance with a formula stated in the order. In compliance with the FPC order, the Company filed a computation in late 1976 which showed refunds, with interest, to be approximately \$90 million through October 1976. Based upon the Company's delivery rate during 1977, an updated refund calculation would not significantly differ from the amount as filed.

The FPC's opinion stated that when the Company has delivered an amount of gas equivalent to the contract amount less the amount of gas for which it has paid refunds, the Company shall be permitted to charge the contract price plus the amount of the refunds previously paid on an equivalent amount of gas. Similar charges are also permitted if deliveries exceed 625 mmcf per day. If the FPC's action is upheld and the Company subsequently recovers the amount refunded, the net economic loss to the Company will be the difference between the present value of the refunds and the present value of the recoveries, less related tax effects. The Company has made no provision in the accounts as the net economic loss would be immaterial and the legal validity of the FPC order is still being contested.

In recent years the Company has acquired leases when available and has discovered and is developing additional gas reserves on these leases sufficient to enable the Company to meet the total contract quan-

tity. The Company will continue to take all practicable measures to meet its obligations under this contract. This exploration and development program is not expected to result in out-of-pocket losses to the Company, taking into consideration the price the Company would receive for reserves remaining after the contract has been fulfilled. Therefore, no provision for loss has been made in the accounts.

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#### **Note 19—Negotiations With Governments of Foreign Oil Producing Countries**

In 1977, negotiations with the Angolan government were well advanced toward finalization of a new participation agreement under which the government will acquire a majority interest in the Company's oil exploration and producing properties. Although the final agreement has yet to be signed, the Company believes adequate provisions have been made so that the settlement will not have a material effect on the Company's net assets or net income.

In late 1976, the Company received payment from the Nigerian government covering its purchase, retroactive to 1974, of 55 percent of the Company's oil exploration and producing concessions. The payment received included compensation for the properties transferred, and was applied to the net book value of the Company's properties, reimbursement of certain prior year operating expenses and interest on the net amount due to the Company.

During 1976 the Company initiated negotiations with the Ecuadorian government aimed at an orderly withdrawal by the Company from its operations in Ecuador. The government of Ecuador issued a decree which authorized its national oil company to purchase, effective December 31, 1976, the Company's 37.5 percent interest in an oil exploration and production contract and 50 percent interest in a pipeline. Under the terms of the agreement reached with the Ecuadorian government, the Company received compensation for its interests based on the net book value of its assets.

In February 1976, the Company and its partner, Continental Oil Company, signed a participation agreement with the British government under which the Company and its partner each transferred to the British government an additional 8.8 percent interest in the title to their leases in the North Sea, giving the government a 51 percent ownership interest. In addition to royalty oil, the government received the right to purchase at market prices up to 51 percent of each field's output within six years after production begins. Under the agreement, the financial benefits and obligations of the three parties remain unchanged.



## Note 20—Foreign Currency Adjustments

An analysis of the net foreign currency exchange adjustments included in income follows:

	Millions of Dollars	
	Gain (Loss)	
	1977	1976
Long-term debt .....	\$ 16	\$11
Working capital .....	(16)	4
Exchange gain (loss) .....	—	15
Exchange rate effect—Canadian inventories ..	(34)	4
Minority interest .....	12	(2)
Tax effect .....	2	(1)
	<u>\$(20)</u>	<u>\$16</u>
Canada .....	\$(26)	\$ 4
Europe .....	7	(3)
Other Foreign .....	(1)	15
	<u>\$(20)</u>	<u>\$16</u>

Exchange gains (losses) are included in other revenues. Included in the net adjustments were unrealized gains of \$4 million in 1977 and unrealized losses of \$1 million in 1976.

## Note 21—Stock Options

The Company has 1974, 1968 and 1951 Stock Option Plans under which stock options have been granted to certain officers and employees of the Company and its subsidiaries. No more options may be granted under the 1951 Plan.

Treasury shares reserved for issuance under all plans at December 31, 1977 and 1976 were 4,150,150 and 4,443,354 shares, respectively. Of the treasury shares reserved at such respective dates, 415,200 and 718,604 shares were subject to options granted and 3,734,950 and 3,724,750 shares were available for granting options.

Options granted under each of the three plans expire from 5 to 10 years after the option date depending on the plan under which the options were granted and whether the options were qualified (as defined in the Internal Revenue Code) or nonqualified. Options are generally exercisable one year from the option date, except that options granted under the 1974 Plan in exchange for the surrender of outstanding options are exercisable six months after the option date. Nonqualified stock options granted under the 1968 Plan are exercisable only to the extent that the qualified stock options covering the same shares remain unexercised on their expiration date. In addition, qualified stock options granted under the 1968 Plan or which may be granted under the 1974 Plan may not be exercised while there is outstanding any qualified stock option previously granted to the same individual at the same or a higher option price.

The 1974 Plan allows the granting of nonqualified stock options with variable price options and stock appreciation rights. No options have been granted with the variable price feature. Options with attendant stock appreciation rights entitle the optionee to surrender

unexercised options to the Company in exchange for shares of capital stock of the Company having an aggregate value equal to the excess of the fair market value of one share over the option price per share times the number of shares covered by the options surrendered. The Human Resources Committee of the Board of Directors has the right to determine that the Company's obligation in respect of a stock appreciation right be paid in cash or part in cash and part in shares.

Proceeds from options exercised are credited to capital accounts; no amounts are charged to income in connection with the exercise of such options.

Information regarding options granted and outstanding is as follows (total option price in millions):

Year Option Granted	Option Price Per Share(1)	Dec. 31, 1977(2)		Dec. 31, 1976(2)	
		Number of Shares	Total Option Price	Number of Shares	Total Option Price
1967 .....	\$32.63	—	\$ —	45,004	\$ 1.5
1968 .....	36.66	55,200	2.0	62,400	2.3
1971 .....	29.38	57,250	1.7	62,050	1.8
1972 .....	26.81	66,400	1.8	73,400	2.0
1973 .....	27.00	8,000	.2	9,000	.2
1974 .....	17.91	223,350	4.1	451,750	8.1
1975 .....	21.67	5,000	.1	15,000	.3
		<u>415,200</u>	<u>\$9.9</u>	<u>718,604</u>	<u>\$16.2</u>

- (1) At the time each option was granted, the option price per share was the market value thereof. Option price shown is average per share for all options granted during the year.
- (2) At December 31, 1977 and 1976, respectively, options covering 415,200 and 718,604 shares were exercisable.

Options which became exercisable or were exercised during 1977 and 1976 are as follows (totals in millions):

	Number of Shares	Option Price		Fair Market Value at Date Exercisable or Exercised	
		Average Per Share	Total	Average Per Share	Total
Options which became exercisable:					
1977 .....	None				
1976 .....	15,000	\$21.67	\$0.3	\$26.96	\$0.4
Options exercised:					
1977 .....	6,500	21.41	0.1	29.70	0.2
1976 .....	5,700	18.96	0.1	27.27	0.2

Changes in options outstanding during 1977 were as follows:

	Number of Shares
Options outstanding at January 1, 1977 .....	718,604
Options granted .....	None
Less options:	
Expired .....	62,404
Exercised .....	6,500
Surrendered for stock appreciation rights ..	<u>234,500 (a)</u>
Options outstanding at December 31, 1977 .....	<u>415,200</u>

- (a) In payment for the exercise of the stock appreciation rights, cash of \$427,640 and 72,655 shares were issued.



## Note 22—Commitments

The Company leases certain ocean tankers, service stations and other facilities including office space, tank cars and automobiles under operating lease arrangements. These leases contain various renewal options, purchase options (principally the service stations) and escalation clauses. The total rental expense of all operating leases in 1977 and 1976 was \$122 and \$124 million, respectively, after being reduced by related sublease rentals of \$14 and \$28 million, respectively. Future minimum rental commitments (net of immaterial non-cancelable sublease rentals) required under operating leases having initial or remaining noncancelable lease terms in excess of one year at December 31, 1977 are as follows:

	Millions of Dollars
1978 .....	\$ 97
1979 .....	80
1980 .....	63
1981 .....	40
1982 .....	26
After 1982 .....	<u>181</u>
	<u>\$487</u>

In late 1976 the Financial Accounting Standards Board issued a Statement which established new standards of financial accounting and reporting for leases. Since the Company was in compliance with the Statement in all significant respects prior to its issuance, changes in the Company's capitalization policy to comply with the new standards had an immaterial effect in 1977 and have been adopted on a prospective basis.

The Company's majority-owned Canadian subsidiary has a 16.75 percent interest in a project (operated by Syncrude Canada Ltd.) for the extraction of oil from Athabasca tar sands leases in the province of Alberta. Total project costs for the construction of the 125,000-barrel-a-day plant, expected to be completed in 1978, are estimated to approximate \$1.92 billion. The commitment of the Company's subsidiary will approximate \$322 million, of which \$281 million had been expended through December 31, 1977. Part of the Company's commitment is being financed through a loan of \$91 million from the government of Alberta. Through December 31, 1977, the Company had received approximately \$82 million under this loan arrangement and the balance will be advanced from time to time in amounts related to expenditures made. Through options held by the government of Alberta, the Company's Canadian subsidiary's interest could be reduced to about nine percent with a corresponding reduction in its investment.

For information relating to commitments of the nuclear partnership see Note 6.

The Company has contractual commitments in the ordinary course of business for the acquisition or construction of properties and for the purchase of materials, supplies and services. These commitments are

not considered significant in relation to the net assets of the Company.

The Company also has contractual commitments to certain companies in which it has equity interests to provide, as specified, minimum revenues from crude or product shipments or advance funds which can be applied against future transportation charges. It is anticipated that the shipments received by these companies along with other operating factors will be at levels sufficient to provide them with the revenues necessary to meet their obligations.

## Note 23—Minority Interests

Minority interests in the equity of consolidated subsidiaries, primarily Gulf Oil Canada Limited of which the Company owned 68.2 percent at December 31, 1977 and 68.3 percent at December 31, 1976, were comprised of the following:

	Millions of Dollars	
	December 31	
	1977	1976
Capital stock .....	<u>\$112</u>	\$110
Retained earnings .....	<u>317</u>	285
Other .....	<u>2</u>	2
	<u>\$431</u>	<u>\$397</u>

## Note 24—Kewanee Acquisition

On September 19, 1977, the Company acquired all of the outstanding stock of Kewanee Industries, Inc. for an aggregate cash purchase price of \$455 million. The acquisition of Kewanee has been accounted for as a purchase transaction. Accordingly, the results of operations of Kewanee are included in the accompanying financial statements from October 1, 1977 and the net tangible assets acquired are reflected in the accompanying consolidated financial statements at fair values which approximate the purchase price at October 1, 1977. Included in the net tangible assets acquired are working capital of \$125 million; property, plant and equipment of \$387 million; long-term debt of \$82 million and net other assets of \$25 million.

For 1976, its last full year of operations prior to its acquisition by the Company, Kewanee had total assets of \$389 million at year end and reported net income of \$35 million on revenues of \$430 million for the year.

## Note 25—Replacement Cost Information (Unaudited)

The Securities and Exchange Commission requires the disclosure of replacement cost information of productive capacity and inventories in the Company's Annual Report on Form 10-K. Accordingly, such replacement cost information is included on pages 65 and 66 in this Annual Report and Form 10-K.



**Note 26—Quarterly Financial Data (Unaudited)**

	Millions of Dollars (Unaudited)							
	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	1977	1976	1977	1976	1977	1976	1977	1976
<b>Revenues</b>								
Sales and other operating revenues .....	\$4,803	\$4,278	\$4,761	\$4,211	\$4,987	\$4,631	\$5,044	\$4,997
Other revenues* .....	50	59	59	70	61	56	64	97
	<u>4,853</u>	<u>4,337</u>	<u>4,820</u>	<u>4,281</u>	<u>5,048</u>	<u>4,687</u>	<u>5,108</u>	<u>5,094</u>
<b>Deductions</b>								
Purchase costs* .....	2,763	2,410	2,570	2,241	2,829	2,556	2,774	2,808
Operating, selling and administrative expenses ..	793	708	814	752	868	749	964	854
Taxes other than income taxes .....	519	485	569	519	586	542	518	551
Depreciation, etc. ....	147	148	166	157	176	158	195	168
Other deductions .....	87	101	108	78	93	115	103	91
	<u>4,309</u>	<u>3,852</u>	<u>4,227</u>	<u>3,747</u>	<u>4,552</u>	<u>4,120</u>	<u>4,554</u>	<u>4,472</u>
Income Before Taxes on Income .....	544	485	593	534	496	567	554	622
Taxes on Income .....	378	287	377	326	301	375	379	404
Net Income .....	<u>\$ 166</u>	<u>\$ 198</u>	<u>\$ 216</u>	<u>\$ 208</u>	<u>\$ 195</u>	<u>\$ 192</u>	<u>\$ 175</u>	<u>\$ 218</u>
Net Income Per Share .....	<u>\$ .85</u>	<u>\$ 1.02</u>	<u>\$ 1.11</u>	<u>\$ 1.06</u>	<u>\$ 1.00</u>	<u>\$ .99</u>	<u>\$ .90</u>	<u>\$ 1.12</u>

\*The Company reclassified the effect of currency rate changes on Canadian inventories to purchase costs in 1977. See Note 20.

**Note 27—Event (Unaudited) Subsequent to Date of Report of Independent Accountants**

On March 2, 1978, a state judge in the Santa Fe, New Mexico District Court entered a default judgment (without fixing damages) against General Atomic Com-

pany in the United Nuclear litigation described in Note 6 on page 32. General Atomic plans to appeal this decision, and the Company continues to believe that ultimately General Atomic ought to prevail in this litigation.

**Report of Independent Accountants**

February 28, 1978

To the Shareholders and Board of  
Directors of Gulf Oil Corporation

We have examined the accompanying consolidated statement of financial position of Gulf Oil Corporation and its subsidiaries at December 31, 1977 and 1976, and the related consolidated statements of income and retained earnings and of changes in financial position for the years then ended, and the supplemental schedules on pages 65 to 67. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the consolidated financial statements of Gulf Oil Canada Limited and its subsidiaries, which constitute no more than 13 percent of total revenues in each of the two years ended December 31, 1977 and 17 percent of total assets at December 31, 1977 and December 31, 1976. These statements were examined by other independent accountants whose report thereon has been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for these companies, is based solely upon the report of the other independent accountants.

As discussed in Notes 6 and 16, the Company, a subsidiary of the Company, and a partnership in which the Company has a 50 percent interest are involved in a number of legal proceedings concerning uranium matters including the alleged effect of certain foreign marketing arrangements. While the Company believes

that the resolution of these matters taken as a whole will not result in a material loss to the Company, there have been developments in 1977 with respect to these proceedings and we are unable to conclude on the possible effects, if any, on the Company's consolidated financial statements of the resolution of the uranium litigation. In our report dated February 23, 1977, our opinion on the 1976 consolidated financial statements was unqualified. However, in view of the current uncertainty, our present opinion on the 1976 consolidated financial statements, as presented herein, is different from that expressed in our previous report.

In our opinion, based on our examinations and the report of other independent accountants mentioned above, and subject to the effects, if any, on the consolidated financial statements as might have been required had the outcome of the uncertainty referred to in the preceding paragraph been known, the accompanying consolidated financial statements and supplemental schedules referred to above present fairly the financial position of Gulf Oil Corporation and its subsidiaries at December 31, 1977 and 1976 and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied.

*Pricewaterhouse & Co.*

600 Grant Street, Pittsburgh, Pennsylvania 15219

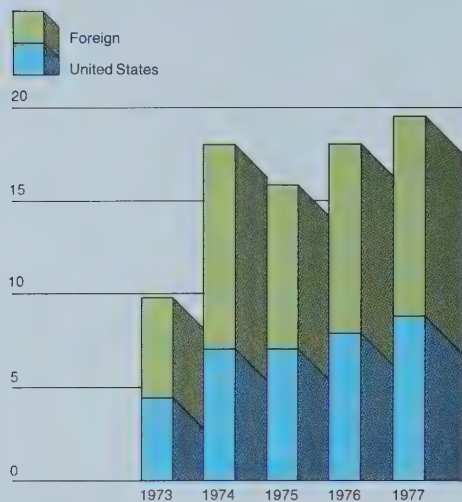


# Five-Year Financial and Statistical Summary

## Sales and Other Operating Revenues

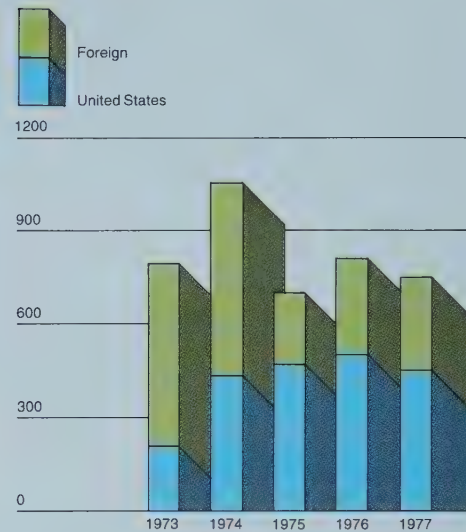
Including Consumer Excise Taxes

Billions of Dollars



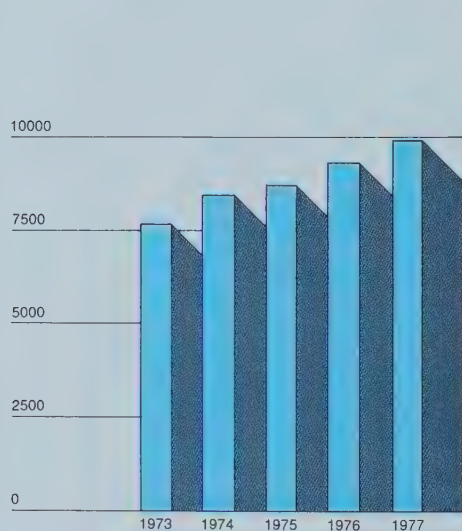
## Net Income

Millions of Dollars



## Employed Capital

Millions of Dollars



## Total Capitalization

Millions of Dollars





	1977	1976	1975	1974	1973
(Dollar Amounts in Millions)					
Total revenues .....	\$19,829	\$18,399*	\$16,050*	\$18,199*	\$ 9,996
Net income .....	\$ 752	\$ 816	\$ 700	\$ 1,065	\$ 800
Cash dividends .....	\$ 360	\$ 336	\$ 331	\$ 307	\$ 296
Per-share data					
Net income .....	\$ 3.86	\$ 4.19	\$ 3.60	\$ 5.47	\$ 4.06
Cash dividends .....	\$ 1.85	\$ 1.73	\$ 1.70	\$ 1.58	\$ 1.50
Shareholders' equity .....	\$ 37.63	\$ 35.62	\$ 33.17	\$ 31.28	\$ 27.01
Financial position at year-end					
Current assets .....	\$ 5,187	\$ 6,179	\$ 5,473	\$ 5,774	\$ 3,918
Current liabilities .....	4,232	4,191	3,738	4,064	2,404
Working capital .....	955	1,988	1,735	1,710	1,514
Properties .....	8,332	6,632	6,236	6,035	5,468
Investments and other assets .....	706	638	716	694	688
Employed capital .....	9,993	9,258	8,687	8,439	7,670
Long-term debt .....	1,307	1,168	1,294	1,471	1,608
Minority interests .....	431	397	353	314	266
Other long-term liabilities .....	918	751	582	565	467
Net assets (shareholders' equity) .....	\$ 7,337	\$ 6,942	\$ 6,458	\$ 6,089	\$ 5,329
Total assets .....	\$14,225	\$13,449	\$12,425	\$12,503	\$10,074
Changes in financial position					
Funds provided by:					
Net income .....	\$ 752	\$ 816	\$ 700	\$ 1,065	\$ 800
Noncash income items .....	833	746	839	732	760
Funds from operations .....	1,585	1,562	1,539	1,797	1,560
New financing .....	233	156	156	75	60
Other—net .....	269	525	264	280	310
	2,087	2,243	1,959	2,152	1,930
Funds used for:					
Properties and business investments .....	2,523	1,378	1,229	1,406	823
Reduction of long-term debt and production payments ..	171	211	225	243	397
Dividends .....	360	336	331	307	296
Other—net .....	66	65	149	—	344
	3,120	1,990	1,934	1,956	1,860
Increase (decrease) in working capital .....	\$(1,033)	\$ 253	\$ 25	\$ 196	\$ 70
Capital and exploration expenditures					
Plant expenditures .....	\$ 2,054	\$ 1,362	\$ 1,131	\$ 1,399	\$ 784
Business investments, including Kewanee .....	469	16	98	7	39
Exploration expense .....	222	160	133	125	80
Dry hole expense .....	268	204	184	130	76
	\$ 3,013	\$ 1,742	\$ 1,546	\$ 1,661	\$ 979
Wages, salaries and employee benefits .....	\$ 1,134	\$ 1,113	\$ 963	\$ 810	\$ 739
Employees at year-end .....	59,400	53,300	52,100	52,700	51,600
Shareholders at year-end .....	352,553	356,768	375,191	372,415	347,731
Weighted average shares outstanding (in thousands) .....	194,950	194,804	194,710	194,658	197,250

\* Restated. See Note 26 on page 43.

The results of operations of Kewanee are included above from October 1, 1977. Total operating data in the five-year statistical summary includes 100 percent of volumes of all consolidated subsidiaries (more than 50 percent owned) and equity interest in companies owned 50 percent or less. The volumetric data included in this five-year financial and statistical summary also includes amounts related to Kewanee from October 1, 1977, except that chemical volumes exclude Kewanee amounts because of the differences existing in the chemical mix and because there is no readily available conversion measurement.



# Five-Year Financial and Statistical Summary (continued)

	1977	1976	1975	1974	1973
<b>Net crude oil produced, including participation and long-term purchase arrangements (daily average barrels)</b>					
United States					
California—onshore .....	7,700	8,600	7,900	6,100	5,600
offshore .....	4,300	5,000	5,600	6,200	6,900
	<u>12,000</u>	<u>13,600</u>	<u>13,500</u>	<u>12,300</u>	<u>12,500</u>
Louisiana—onshore .....	58,900	61,500	68,200	80,700	96,800
offshore .....	61,300	57,000	50,400	53,300	64,400
	<u>120,200</u>	<u>118,500</u>	<u>118,600</u>	<u>134,000</u>	<u>161,200</u>
Texas .....	141,600	144,100	161,700	183,800	197,900
Mississippi .....	17,700	18,300	20,100	21,700	22,600
New Mexico .....	11,200	11,400	11,400	11,300	11,900
Oklahoma .....	9,500	9,800	10,200	11,000	11,700
Utah .....	7,800	9,700	13,100	15,400	10,000
Wyoming .....	6,700	5,800	5,900	6,500	7,000
North Dakota .....	2,300	100	100	100	100
Kansas .....	1,800	1,200	1,300	1,300	1,500
Arkansas .....	1,600	1,300	1,100	900	800
Colorado .....	1,300	1,100	600	400	400
Other .....	2,600	2,800	3,000	2,200	2,100
Total United States .....	<u>336,300</u>	<u>337,700</u>	<u>360,600</u>	<u>400,900</u>	<u>439,700</u>
Canada .....	<u>66,200</u>	<u>71,000</u>	<u>79,900</u>	<u>89,200</u>	<u>113,400</u>
Latin America					
Venezuela—Equity .....	—	—	146,700	161,400	166,600
Long-term purchases .....	95,500	98,000	—	—	—
Ecuador—Equity .....	—	67,400	49,500	65,300	86,600
Total Latin America .....	<u>95,500</u>	<u>165,400</u>	<u>196,200</u>	<u>226,700</u>	<u>253,200</u>
Middle East					
Kuwait					
Equity .....	—	—	120,800	531,100	1,039,500
Participation purchases .....	—	—	86,100	521,000	346,500
Long-term purchases .....	439,000	520,900	454,300	—	—
	<u>439,000</u>	<u>520,900</u>	<u>661,200</u>	<u>1,052,100</u>	<u>1,386,000</u>
Iran					
Equity .....	—	—	—	—	70,600
Long-term purchases .....	305,400	310,600	331,700	293,000	236,200
	<u>305,400</u>	<u>310,600</u>	<u>331,700</u>	<u>293,000</u>	<u>306,800</u>
Total Middle East .....	<u>744,400</u>	<u>831,500</u>	<u>992,900</u>	<u>1,345,100</u>	<u>1,692,800</u>
Africa					
Nigeria					
Equity .....	130,800	131,800	102,200	297,700	364,600
Participation purchases .....	99,700	97,500	79,600	71,400	—
	<u>230,500</u>	<u>229,300</u>	<u>181,800</u>	<u>369,100</u>	<u>364,600</u>
Angola—Equity .....	122,700	77,700	133,800	150,700	144,200
Gabon—Equity .....	2,600	3,200	4,000	—	—
Zaire—Equity .....	10,800	12,300	—	—	—
Total Africa .....	<u>366,600</u>	<u>322,500</u>	<u>319,600</u>	<u>519,800</u>	<u>508,800</u>
Equity Interest (Other) .....	2,200	2,200	2,900	3,000	4,200
Total net production, including participation and long-term purchases .....	<u>1,611,200</u>	<u>1,730,300</u>	<u>1,952,100</u>	<u>2,584,700</u>	<u>3,012,100</u>
<b>Gross crude oil produced, including participation and long-term purchase arrangements (daily average barrels)</b>					
United States .....	432,300	400,700	426,500	476,500	525,000
Canada .....	102,300	106,100	117,100	127,200	136,300
Other Foreign .....	<u>1,285,700</u>	<u>1,515,300</u>	<u>1,598,500</u>	<u>2,143,600</u>	<u>2,521,600</u>
Total gross production, including participation and long-term purchases ...	<u>1,820,300</u>	<u>2,022,100</u>	<u>2,142,100</u>	<u>2,747,300</u>	<u>3,182,900</u>



	1977		1976		1975		1974		1973	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
<b>Oil and gas acreage at December 31</b> <b>(thousands of acres)</b>										
United States										
Producing										
Onshore .....	4,712	1,800	4,232	1,576	3,878	1,523	3,580	1,461	3,505	1,441
Offshore .....	287	172	233	158	213	156	185	146	178	144
	<u>4,999</u>	<u>1,972</u>	<u>4,465</u>	<u>1,734</u>	<u>4,091</u>	<u>1,679</u>	<u>3,765</u>	<u>1,607</u>	<u>3,683</u>	<u>1,585</u>
Nonproducing										
Onshore .....	22,618	13,111	18,203	10,491	17,514	9,912	16,837	9,558	12,564	7,439
Offshore .....	593	329	523	286	483	266	381	172	259	118
	<u>23,211</u>	<u>13,440</u>	<u>18,726</u>	<u>10,777</u>	<u>17,997</u>	<u>10,178</u>	<u>17,218</u>	<u>9,730</u>	<u>12,823</u>	<u>7,557</u>
Total .....	<u>28,210</u>	<u>15,412</u>	<u>23,191</u>	<u>12,511</u>	<u>22,088</u>	<u>11,857</u>	<u>20,983</u>	<u>11,337</u>	<u>16,506</u>	<u>9,142</u>
Canada										
Producing .....	1,948	1,093	1,831	1,003	1,622	874	1,614	903	1,559	855
Nonproducing .....	110,364	23,620	86,902	24,169	91,233	25,203	80,772	23,728	86,264	24,813
Total .....	<u>112,312</u>	<u>24,713</u>	<u>88,733</u>	<u>25,172</u>	<u>92,855</u>	<u>26,077</u>	<u>82,386</u>	<u>24,631</u>	<u>87,823</u>	<u>25,668</u>
North Sea—nonproducing .....	<u>3,765</u>	<u>1,020</u>	<u>2,031</u>	<u>760</u>	<u>2,141</u>	<u>821</u>	<u>2,533</u>	<u>958</u>	<u>25,080</u>	<u>4,431</u>
Africa										
Producing .....	2,595	1,868	5,181	3,037	4,934	2,914	4,934	2,914	4,793	3,570
Nonproducing .....	7,049	3,803	12,205	5,012	26,747	20,509	30,499	24,055	27,852	22,202
Total .....	<u>9,644</u>	<u>5,671</u>	<u>17,386</u>	<u>8,049</u>	<u>31,681</u>	<u>23,423</u>	<u>35,433</u>	<u>26,969</u>	<u>32,645</u>	<u>25,772</u>
Other Foreign										
Producing .....	—	—	—	—	2,824	1,043	4,472	1,525	4,534	2,050
Nonproducing .....	4,497	1,729	—	—	443	167	443	167	988	556
Total .....	<u>4,497</u>	<u>1,729</u>	<u>—</u>	<u>—</u>	<u>3,267</u>	<u>1,210</u>	<u>4,915</u>	<u>1,692</u>	<u>5,522</u>	<u>2,606</u>

For additional information regarding the Company's oil and gas acreage, see Form 10-K, Item 3 on pages 57 to 60.

	1977		1976		1975		1974		1973	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
<b>Wells capable of producing at December 31</b>										
United States										
Oil .....	37,577	14,333	33,196	12,037	32,476	11,726	33,661	13,519	30,876	13,181
Gas .....	4,078	2,159	3,502	1,719	3,397	1,655	3,975	1,754	2,954	1,705
Total .....	<u>41,655</u>	<u>16,492</u>	<u>36,698</u>	<u>13,756</u>	<u>35,873</u>	<u>13,381</u>	<u>37,636</u>	<u>15,273</u>	<u>33,830</u>	<u>14,886</u>
Canada										
Oil .....	5,507	1,210	5,487	1,207	5,471	1,175	5,451	1,184	5,578	1,203
Gas .....	1,039	289	920	230	867	225	839	216	829	212
Total .....	<u>6,546</u>	<u>1,499</u>	<u>6,407</u>	<u>1,437</u>	<u>6,338</u>	<u>1,400</u>	<u>6,290</u>	<u>1,400</u>	<u>6,407</u>	<u>1,415</u>
Other Foreign										
Oil .....	449	248	422	234	5,289	2,108	5,903	2,365	5,738	2,438
Gas .....	1	—	3	1	22	8	23	8	23	9
Total .....	<u>450</u>	<u>248</u>	<u>425</u>	<u>235</u>	<u>5,311</u>	<u>2,116</u>	<u>5,926</u>	<u>2,373</u>	<u>5,761</u>	<u>2,447</u>
Total .....	<u>48,651</u>	<u>18,239</u>	<u>43,530</u>	<u>15,428</u>	<u>47,522</u>	<u>16,897</u>	<u>49,852</u>	<u>19,046</u>	<u>45,998</u>	<u>18,748</u>
<b>Wells drilled during the year</b>										
United States										
Oil .....	981	595	1,170	474	919	466	879	450	624	289
Gas .....	238	162	169	99	129	62	100	41	73	40
Dry .....	238	169	138	98	116	67	110	68	89	59
Total .....	<u>1,457</u>	<u>926</u>	<u>1,477</u>	<u>671</u>	<u>1,164</u>	<u>595</u>	<u>1,089</u>	<u>559</u>	<u>786</u>	<u>388</u>
Canada										
Oil .....	39	24	17	12	16	8	30	12	25	7
Gas .....	86	52	70	29	41	18	27	10	25	13
Dry .....	49	33	37	18	37	19	27	15	46	29
Total .....	<u>174</u>	<u>109</u>	<u>124</u>	<u>59</u>	<u>94</u>	<u>45</u>	<u>84</u>	<u>37</u>	<u>96</u>	<u>49</u>
Other Foreign										
Oil .....	24	9	36	15	126	51	231	94	175	103
Gas .....	1	—	4	2	2	—	—	—	—	—
Dry .....	26	8	25	10	52	22	61	27	65	39
Total .....	<u>51</u>	<u>17</u>	<u>65</u>	<u>27</u>	<u>180</u>	<u>73</u>	<u>292</u>	<u>121</u>	<u>240</u>	<u>142</u>
Total .....	<u>1,682</u>	<u>1,052</u>	<u>1,666</u>	<u>757</u>	<u>1,438</u>	<u>713</u>	<u>1,465</u>	<u>717</u>	<u>1,122</u>	<u>579</u>

Gross wells represent the total number of wells in which all or part of the working interest is owned by the Company.  
Net wells represent only that part of the working interest applicable to the Company, that is, the sum of all fractional interests.



## Five-Year Financial and Statistical Summary (continued)

	1977	1976	1975	1974	1973
<b>Net natural gas liquids produced (daily average barrels)</b>					
United States .....	65,900	60,800	64,900	75,400	80,100
Canada .....	10,100	9,800	10,900	10,000	11,500
Latin America .....	—	—	2,000	3,200	3,900
Middle East .....	—	—	10,200	26,800	32,700
Total .....	76,000	70,600	88,000	115,400	128,200
<b>Natural gas liquids sold (daily average barrels)</b>					
United States .....	123,200	100,900	90,000	86,700	122,300
Canada .....	28,800	29,700	27,100	24,900	24,600
Latin America .....	6,200	3,600	2,800	6,500	5,500
Europe .....	9,000	8,000	8,300	8,100	8,000
Middle East .....	—	400	10,900	24,300	35,600
Asia .....	6,000	4,200	3,400	2,400	1,800
Total .....	173,200	146,800	142,500	152,900	197,800
<b>Net natural gas produced (thousand cubic feet per day)</b>					
United States					
Texas .....	807,500	794,100	974,600	1,118,900	1,234,000
Louisiana—Offshore .....	579,900	399,600	429,500	436,600	536,900
Onshore .....	163,800	198,100	245,400	302,900	368,300
New Mexico .....	171,500	168,100	154,400	156,100	150,100
Oklahoma .....	68,400	69,100	71,300	69,200	66,900
Other .....	73,800	83,500	83,200	99,200	120,400
	1,864,900	1,712,500	1,958,400	2,182,900	2,476,600
Canada .....	301,800	322,600	369,300	405,500	434,300
Latin America .....	—	—	98,700	99,500	91,000
Middle East .....	—	—	7,000	340,500	358,500
Total .....	2,166,700	2,035,100	2,433,400	3,028,400	3,360,400
<b>Natural gas sold (thousand cubic feet per day)</b>					
United States					
Regulated					
Texas Eastern .....	592,400	361,900	357,500	391,200	509,100
Other .....	893,000	991,900	1,172,900	1,211,800	1,358,500
	1,485,400	1,353,800	1,530,400	1,603,000	1,867,600
Nonregulated .....	553,100	510,600	540,300	701,700	764,100
	2,038,500	1,864,400	2,070,700	2,304,700	2,631,700
Canada .....	431,100	455,000	481,100	492,200	499,700
Latin America .....	—	—	123,300	122,000	99,500
Middle East .....	—	—	7,000	44,500	114,600
Total .....	2,469,600	2,319,400	2,682,100	2,963,400	3,345,500
<b>Chemicals sold (millions of pounds)</b>					
United States					
Benzene and other aromatics .....	1,650	1,630	1,270	1,630	1,640
Ethylene and other olefins .....	2,000	1,640	1,250	1,490	1,480
Plastics .....	660	500	390	530	490
Blasting materials .....	420	380	430	420	430
Other .....	1,760	1,560	1,520	1,800	2,420
	6,490	5,710	4,860	5,870	6,460
Foreign					
Benzene and other aromatics .....	920	900	760	1,310	1,190
Ethylene and other olefins .....	1,340	1,490	970	1,190	1,280
Plastics .....	220	160	200	170	210
Other .....	1,850	1,670	1,430	1,820	1,560
	4,330	4,220	3,360	4,490	4,240
Total .....	10,820	9,930	8,220	10,360	10,700
<b>Coal mined (thousands of tons)</b>					
United States					
Surface .....	7,100	6,500	5,700	6,000	6,500
Underground .....	1,400	1,400	1,600	1,500	1,600
Total .....	8,500	7,900	7,300	7,500	8,100
<b>Uranium produced (thousands of pounds)</b>					
United States .....	60	—	—	—	—
Canada .....	2,570	1,900	370	—	—
Total .....	2,630	1,900	370	—	—



	Refining Capacity 12-31-77	1977	1976	1975	1974	1973
<b>Crude oil processed (daily average barrels)*</b>						
United States						
Port Arthur, Texas .....	334,500	<b>290,600</b>	304,500	289,200	299,500	307,000
Philadelphia, Pennsylvania .....	201,200	<b>203,100</b>	153,500	156,600	176,700	164,000
Alliance, Louisiana .....	195,900	<b>197,300</b>	200,700	134,200	154,200	181,600
Toledo, Ohio .....	50,300	<b>44,100</b>	42,800	46,800	49,900	49,200
Santa Fe Springs, California .....	51,500	<b>46,200</b>	49,200	45,700	47,100	45,600
Cincinnati, Ohio .....	42,700	<b>39,700</b>	43,600	38,000	40,700	42,400
Venice, Louisiana .....	28,700	<b>19,300</b>	18,400	19,200	20,200	17,400
Hercules, California .....	—	—	1,900	19,900	19,700	21,000
Processed by others for Gulf .....	—	—	—	—	5,000	—
Total United States .....	<u>904,800</u>	<u><b>840,300</b></u>	<u>814,600</u>	<u>749,600</u>	<u>813,000</u>	<u>828,200</u>
Canada						
Alberta .....	83,200	<b>83,500</b>	72,400	77,900	77,600	70,200
Quebec .....	77,300	<b>72,100</b>	63,900	62,300	69,100	70,400
Ontario .....	79,100	<b>69,700</b>	60,900	58,600	62,700	57,300
Nova Scotia .....	81,000	<b>66,100</b>	46,000	53,000	71,300	79,900
British Columbia .....	44,900	<b>41,100</b>	44,600	43,900	44,200	43,800
Saskatchewan .....	13,300	<b>6,300</b>	6,300	5,400	3,700	3,300
Processed by others for Gulf .....	—	<b>100</b>	1,300	2,300	1,900	2,300
Total Canada .....	<u>378,800</u>	<u><b>338,900</b></u>	<u>295,400</u>	<u>303,400</u>	<u>330,500</u>	<u>327,200</u>
Latin America						
Venezuela .....	—	—	—	75,500	96,000	85,600
Puerto Rico .....	37,800	<b>33,400</b>	34,600	35,200	34,200	26,700
Ecuador .....	8,000	<b>7,200</b>	7,300	7,200	7,000	6,300
Total Latin America .....	<u>45,800</u>	<u><b>40,600</b></u>	<u>41,900</u>	<u>117,900</u>	<u>137,200</u>	<u>118,600</u>
Europe						
Wales .....	103,000	<b>52,400</b>	49,500	45,800	66,100	93,600
Netherlands .....	94,000	<b>66,200</b>	64,600	49,700	72,300	83,000
Denmark .....	98,000	<b>67,600</b>	74,100	70,000	88,100	90,900
Italy .....	82,500	<b>57,900</b>	64,100	59,100	68,300	57,200
Equity Interest						
France (18%) .....	77,100	<b>57,500</b>	50,800	54,000	65,000	62,000
Spain (34%) .....	48,300	<b>41,900</b>	47,300	48,300	49,100	53,100
Switzerland (25%) .....	14,800	<b>15,500</b>	14,600	13,700	15,200	13,100
Processed by others for Gulf .....	—	<b>10,900</b>	20,700	35,100	38,700	34,900
Total Europe .....	<u>517,700</u>	<u><b>369,900</b></u>	<u>385,700</u>	<u>375,700</u>	<u>462,800</u>	<u>487,800</u>
Middle East						
Kuwait .....	—	—	—	3,600	59,100	76,200
Iran .....	—	—	—	—	—	4,700
Processed by others for Gulf .....	—	<b>13,600</b>	15,100	20,400	20,800	15,900
Total Middle East .....	<u>—</u>	<u><b>13,600</b></u>	<u>15,100</u>	<u>24,000</u>	<u>79,900</u>	<u>96,800</u>
Asia						
Taiwan .....	12,400	<b>12,400</b>	11,300	12,100	9,600	11,400
Equity Interest						
Korea (50%) .....	123,000	<b>111,800</b>	100,600	89,600	82,800	74,700
Okinawa (45%) .....	40,200	<b>32,800</b>	32,000	28,600	35,200	31,400
Processed by others for Gulf .....	—	<b>5,200</b>	—	—	—	—
Total Asia .....	<u>175,600</u>	<u><b>162,200</b></u>	<u>143,900</u>	<u>130,300</u>	<u>127,600</u>	<u>117,500</u>
Total .....	<u>2,022,700</u>	<u><b>1,765,500</b></u>	<u>1,696,600</u>	<u>1,700,900</u>	<u>1,951,000</u>	<u>1,976,100</u>
<b>Percent of refining capacity utilized</b>						
United States .....		<b>93</b>	92	87	93	96
Foreign .....		<b>80</b>	79	75	83	85

\*Includes crude oil processed by the Company for its own account and for others, and by others for the Company's account.



## Five-Year Financial and Statistical Summary (continued)

	1977	1976	1975	1974	1973
<b>Refined products sold (daily average barrels)</b>					
United States	821,900	828,600	805,700	860,600	911,800
Canada	286,400	258,000	263,500	268,300	267,700
Latin America	65,400	60,500	79,500	83,100	76,700
Europe	325,200	318,900	320,100	297,400	352,000
Asia	154,900	138,400	122,800	112,500	107,000
Other Eastern Hemisphere	15,300	4,900	18,600	50,900	75,900
Total	1,669,100	1,609,300	1,610,200	1,672,800	1,791,100
<b>Refined products sold (daily average barrels)</b>					
United States					
Gasoline	469,000	479,600	467,900	476,300	502,600
Distillate	228,400	213,500	208,700	232,300	229,400
Residual	53,900	61,500	64,000	69,200	97,000
Kerosene	42,800	41,000	39,800	47,000	45,700
Lubricating oils	12,800	10,900	10,000	13,000	14,900
Other manufactured oils	15,000	22,100	15,300	22,800	22,200
Total United States	821,900	828,600	805,700	860,600	911,800
Canada					
Gasoline	114,400	106,500	105,800	108,500	111,800
Distillate	90,700	82,100	81,900	85,400	84,400
Residual	48,700	38,900	42,100	41,900	40,800
Kerosene	3,000	2,800	1,600	600	500
Lubricating oils	2,500	2,100	1,900	2,000	2,000
Other manufactured oils	27,100	25,600	30,200	29,900	28,200
Total Canada	286,400	258,000	263,500	268,300	267,700
Other Foreign					
Gasoline	86,300	81,000	89,800	82,500	95,400
Distillate	171,500	159,400	167,900	151,000	185,800
Residual	209,300	200,000	214,400	239,100	253,800
Kerosene	30,800	29,100	24,000	21,200	24,200
Lubricating oils	9,500	8,600	6,500	9,600	10,700
Other manufactured oils	53,400	44,600	38,400	40,500	41,700
Total Other Foreign	560,800	522,700	541,000	543,900	611,600
Total	1,669,100	1,609,300	1,610,200	1,672,800	1,791,100
<b>United States imports (daily average barrels)</b>					
Crude oil from					
Nigeria	234,400	203,400	118,800	160,900	59,700
Libya	45,200	43,700	13,800	—	—
United Arab Emirates	38,900	17,900	—	—	—
Algeria	17,900	8,400	5,400	1,400	2,800
Angola	12,600	6,200	60,900	34,200	37,600
Norway	8,800	—	1,300	—	—
Venezuela	7,000	1,200	13,900	19,800	18,900
Gabon	4,300	5,900	2,900	—	—
Saudi Arabia	1,300	2,700	3,100	1,300	2,400
Zaire	—	20,500	—	—	—
Canada	—	5,700	14,600	22,400	28,700
Ecuador	—	4,700	6,300	11,200	4,100
Other	1,900	5,800	7,700	13,700	5,100
Total	372,300	326,100	248,700	264,900	159,300
Refined products	25,800	18,500	18,700	68,200	73,100
<b>Marketing retail outlets*</b>					
United States					
Dealer operated	17,135	17,533	18,182	19,484	22,146
Company operated	1,142	1,323	1,018	443	135
	18,277	18,856	19,200	19,927	22,281
Canada	3,759	3,884	4,373	4,814	5,184
Europe	4,019	4,055	4,081	4,234	4,554
Other Foreign	296	283	369	376	446
Total	26,351	27,078	28,023	29,351	32,465

\*Excludes equity interest retail outlets.



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SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D. C. 20549

**FORM 10-K**

**ANNUAL REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Fiscal Year Ended

**DECEMBER 31, 1977**

Commission File Number 1-3190

**GULF OIL CORPORATION**

A Pennsylvania Corporation

(Exact name and state of incorporation of registrant as specified in charter)

IRS Employer Identification No. 25-0527925

**GULF BUILDING, PITTSBURGH, PENNSYLVANIA 15230**

(Address of principal executive offices)

**412/263-5000**

(Registrant's telephone number)

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The Securities and Exchange Commission has not approved or disapproved of  
any of the information contained in this Report nor has the Commission  
passed upon the accuracy or adequacy of such Report.

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Securities registered pursuant to Section 12(b) of the Act

Title of Class	Name of each exchange on which registered
Capital Stock (without par value)	New York Stock Exchange Midwest Stock Exchange Toronto Stock Exchange Swiss Stock Exchanges
7% Debentures Due 1980	New York Stock Exchange
7% Debentures Due 1981	New York Stock Exchange
8% Debentures Due 1984	New York Stock Exchange
8½ % Debentures Due 1995	New York Stock Exchange

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As of December 31, 1977, the Registrant had outstanding 194,968,491 shares of its Capital Stock (without par value).

The Registrant has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding twelve months and has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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## Item 1. Business

The Financial Accounting Standards Board (FASB) has issued Statement No. 14 which standardizes the reporting of geographic and business segment financial information. This Statement is effective for 1977 and the Company has restated its presentation of such data for 1976 on a comparative basis. The disclosures required by FASB Statement No. 14 are presented on pages 28 and 29 of the accompanying 1977 Annual Report to Shareholders. That information is incorporated herein by reference in further response to the requirements of this item.

In addition, the Company has revised its presentation of external sales and other operating revenues and income (loss) for the years 1975, 1974, and 1973 on a basis which is comparable to the information concerning geographic distribution by major business segment contained in the Notes to Financial Statements. This information is presented below, together with corresponding 1977 and 1976 information.

Millions of Dollars					
Years Ended December 31					
Sales and other operating revenues (including consumer excise taxes)	1977	1976	1975	1974	1973
United States					
Petroleum .....	\$ 7,899	\$ 7,097	\$ 6,520	\$ 6,508	\$ 4,196
Chemicals .....	820	667	535	539	280
Minerals .....	109	92	75	52	47
Nuclear .....	—	—	—	1	7
	<u>8,828</u>	<u>7,856</u>	<u>7,130</u>	<u>7,100</u>	<u>4,530</u>
Canada					
Petroleum .....	2,372	2,147	1,793	1,563	1,112
Chemicals .....	126	127	105	96	63
Minerals .....	48	23	2	—	—
	<u>2,546</u>	<u>2,297</u>	<u>1,900</u>	<u>1,659</u>	<u>1,175</u>
Europe					
Petroleum .....	2,087	1,865	1,723	1,632	1,197
Chemicals .....	170	192	120	208	67
	<u>2,257</u>	<u>2,057</u>	<u>1,843</u>	<u>1,840</u>	<u>1,264</u>
Other Foreign					
Petroleum .....	5,872	5,842	4,918	7,294	2,830
Chemicals .....	92	65	47	59	44
	<u>5,964</u>	<u>5,907</u>	<u>4,965</u>	<u>7,353</u>	<u>2,874</u>
	<u>\$19,595</u>	<u>\$18,117</u>	<u>\$15,838</u>	<u>\$17,952</u>	<u>\$ 9,843</u>
Income (Loss)					
United States					
Petroleum .....	\$ 722	\$ 692	\$ 591	\$ 583	\$ 455
Chemicals .....	49	122	117	182	34
Minerals .....	(17)	(40)	(39)	(38)	(7)
Nuclear .....	(16)	(17)	(27)	(181)	(155)
Non-operating items .....	(278)	(263)	(166)	(138)	(149)
	<u>460</u>	<u>494</u>	<u>476</u>	<u>408</u>	<u>178</u>
Canada					
Petroleum .....	251	290	312	266	167
Chemicals .....	16	19	20	28	(1)
Minerals .....	27	6	(9)	(5)	—
Non-operating items .....	(187)	(204)	(223)	(223)	(104)
	<u>107</u>	<u>111</u>	<u>100</u>	<u>66</u>	<u>62</u>
Europe					
Petroleum .....	(10)	(56)	(148)	(115)	12
Chemicals .....	4	35	12	48	14
Non-operating items .....	11	17	(7)	(8)	(21)
	<u>5</u>	<u>(4)</u>	<u>(143)</u>	<u>(75)</u>	<u>5</u>
Other Foreign					
Petroleum .....	1,301	1,252	2,006	3,222	1,886
Less taxes on income .....	(1,119)	(1,042)	(1,745)	(2,518)	(1,279)
	<u>182</u>	<u>210</u>	<u>261</u>	<u>704</u>	<u>607</u>
Chemicals .....	6	6	(6)	9	9
Non-operating items .....	(8)	(1)	12	(47)	(61)
	<u>180</u>	<u>215</u>	<u>267</u>	<u>666</u>	<u>555</u>
	<u>\$ 752</u>	<u>\$ 816</u>	<u>\$ 700</u>	<u>\$ 1,065</u>	<u>\$ 800</u>



The Company is an integrated petroleum company engaged principally in the production, purchase, transportation, refining and marketing of crude petroleum and natural gas and products derived therefrom. The Company also receives revenues from other activities including chemicals, coal, uranium and other nonpetroleum related products and services. In 1977 the Company acquired Kewanee Industries, Inc. (Kewanee) for an aggregate cash purchase price of \$455 million. Kewanee is a non-integrated oil and gas producer and a manufacturer of a wide variety of chemical products. The acquisition has been accounted for as a purchase and, accordingly, revenues and income of Kewanee from October 1, 1977 have been included in the above tables. The inclusion of the Kewanee amounts does not significantly affect the comparability of 1977 with prior years.

Operating data for the Company and consolidated subsidiaries appears on pages 45 to 50 of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference in further response to the requirements of this item.

In 1977, negotiations with the Angolan government were well advanced toward finalization of a new participation agreement under which the government will acquire a majority interest in the Company's oil exploration and producing properties in that country. During 1976, the Company received payment from the Nigerian government covering its purchase of 55 percent of the Company's oil exploration and producing concessions and, after negotiations aimed at an orderly withdrawal from Ecuador, the Ecuadorian government issued a decree which authorized its national oil company to purchase the Company's holdings effective December 31, 1976. During 1975, the Company's remaining assets and operations in Kuwait and its concession rights and properties in Venezuela were nationalized. Additional information concerning the status of the Company's negotiations and arrangements with foreign oil producing countries is included in Note 19 of Notes to Financial Statements appearing on page 40 of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference in further response to the requirements of this item.

General Atomic Company is a partnership owned and operated on a 50-50 basis by the Company and Scallop Nuclear Inc., a company of the Royal Dutch/Shell Group. Continuing escalation of costs, other problems confronting General Atomic in the commercialization of the HTGR and uncertainties generally surrounding the development of nuclear power led to several contract cancellations by customers. As a result of these developments, in 1975 and early 1976 General Atomic agreed to the termination of its remaining commitments and currently has no commercial reactor orders. Information concerning General Atomic is included in Note 6 of Notes to Financial Statements appearing on pages 32 and 33 of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference in further response to the requirements of this item.

In recent years, the Company's domestic operations have been subject to regulatory controls granted to the Federal Energy Administration (FEA) and the Federal Power Commission (FPC) by Congress. These regulations covered a wide spectrum of activities in the domestic oil and gas industry and significantly affected domestic oil and gas revenue and cost levels. During 1977, the FEA and FPC were absorbed into and became part of the total reorganization of the Department of Energy (DOE). The DOE was enacted into law on October 1, 1977 with wide-spread regulatory authority including duties formerly exercised by the Energy Research and Development Administration, the FEA and the FPC, as well as many energy duties of the Interstate Commerce Commission and the Departments of Defense, Interior and Commerce.

The major functions combined within the DOE continue to significantly affect domestic oil and gas revenue and cost levels. Details regarding certain proceedings with the DOE are included in Notes 17 and 18 of Notes to Financial Statements appearing on pages 39 and 40 of the accompanying 1977 Annual Report to Shareholders and are incorporated herein by reference in further response to the requirements of this item.

The Company is subject to various pollution control regulations of federal, state, local and foreign governments and has made and will continue to make substantial expenditures in its efforts to comply with these requirements. These expenditures aggregated approximately \$248 million during 1977 and the Company expects that during 1978 approximately \$322 million will be spent. These expenditures are expected to increase significantly as anticipated legislative and regulatory changes go into effect.

The petroleum industry is highly competitive. The Company competes with other petroleum companies in the discovery and development of new sources of supply, the transportation of crude and refined products and the refining, distribution and marketing of petroleum and chemical products. The petroleum industry also competes with other industries in supplying alternative forms of energy and other products.



In recent years, the normal problems confronting the petroleum industry have been compounded by the actions of foreign oil producing countries including reduction of production, embargoes on petroleum shipments to the United States and other countries, unilateral changes in the posted or tax-reference price for crude oil, and participation by foreign countries in ownership of operations in their territories. The United States Congress has indicated that it will continue to consider proposals which would require the divestiture of the largest U.S. integrated oil companies. Although, to date, proposals on this issue have been withdrawn or dismissed, it cannot be assumed that the divestiture issue will not be a continuing problem to the industry. The Company cannot predict the extent to which operations and earnings will be affected by these and other developments such as government regulations involving the passthrough of cost increases, production, imports, product allocations, environmental quality control standards, transportation and currency restrictions, as well as labor conditions, technological innovations and further competition.

Tax legislation passed in recent years and other pending tax legislation both in the U.S. and other countries further increases the problems of the petroleum industry regarding costs and, consequently, the availability of adequate supplies of crude oil. In addition, in recent years, the Internal Revenue Service (IRS) has been reviewing the creditability of foreign income taxes which offset the U.S. tax otherwise due on foreign income. This review has received the attention of members of Congress and the Treasury Department. In early 1978, the IRS announced that it was changing its position with regard to the creditability of certain taxes paid on oil production in Saudi Arabia and Libya. The Company does not have operations in these two countries so that the ruling, in itself, does not specifically apply to the Company's operations. However, the IRS also announced general criteria for determining the creditability of foreign taxes which will become effective in 1979. The Company is reviewing its arrangements in all countries where it conducts exploration and production operations to determine what effect, if any, the rulings will have on the creditability of the taxes it pays to those countries. The Company believes that there is no liability for prior years' taxes as to the foreign tax credit issue and that any change in the IRS position will not significantly affect the operations of the Company.

The Company maintains research facilities at several locations, at which approximately 1,718 and 1,408 employees were engaged in full time research activities at December 31, 1977 and 1976, respectively. Research and development expenditures were approximately \$70 and \$64 million in 1977 and 1976, respectively.

At December 31, 1977, the Company had approximately 59,400 employees.

## **Item 2. Summary of Operations**

A report dated December 30, 1975 of a Special Review Committee, appointed by the Company's Board of Directors, concluded that during the period 1960-1974 a total of approximately \$12.3 million of Corporate funds had been used for political contributions and related purposes, some of which were lawful as well as others which were unlawful. The report indicated that somewhat over \$7 million of this amount was expended by the Company abroad, most of it under circumstances which the Committee found to be lawful or as to the legality of which the Committee expressed no view. In addition, the Committee indicated that somewhat less than \$5 million had been made available for political expenditures in the U.S. much of which could be characterized as illegal.

In the years 1974 and 1973, portions of the \$12.3 million referred to in the preceding paragraph were charged as an operating expense in the Company's income statements. Specifically, 1974 operating expense includes two hundred thousand dollars reflecting amounts expended in foreign countries and 1973 includes two hundred thousand dollars expended in the United States and one hundred thousand dollars expended in foreign countries. Also, forty-five thousand dollars of the \$12.3 million were disbursed in 1974 and 1973 from funds which were not recorded on the books of the Company and therefore are not reflected in the respective income statements for those years.

Exhibit 4 to this Form 10-K, which is incorporated herein by reference, sets forth information which may be required to be disclosed in accordance with the March 11, 1975 SEC Consent Decree to which the Company is a party.

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	Millions of Dollars				
	Years Ended December 31				
	1977	1976	1975	1974	1973
<b>STATEMENT OF INCOME</b>					
<b>REVENUES</b>					
Sales and other operating revenues* (including consumer excise taxes)					
United States .....	\$ 8,828	\$ 7,856	\$ 7,130	\$ 7,100	\$ 4,530
Canada .....	2,546	2,297	1,900	1,659	1,175
Europe .....	2,257	2,057	1,843	1,840	1,264
Other Foreign .....	5,964	5,907	4,965	7,353	2,874
	<u>19,595</u>	<u>18,117</u>	<u>15,838</u>	<u>17,952</u>	<u>9,843</u>
Interest income .....	149	189	183	180	107
Equity in earnings (losses) .....	38	40	(23)	16	14
Other revenues .....	47	53**	52**	51**	32
	<u>19,829</u>	<u>18,399</u>	<u>16,050</u>	<u>18,199</u>	<u>9,996</u>
<b>DEDUCTIONS</b>					
Purchased crude oil and products .....	10,936	10,015**	7,314**	8,801**	3,034
Operating expenses .....	1,534	1,400	1,251	1,439	1,225
Selling, general and administrative expenses .....	1,415	1,299	1,216	1,128	933
Consumer excise taxes .....	1,755	1,666	1,570	1,494	1,426
Sales, use, ad valorem and other taxes .....	437	431	644	479	265
Depreciation, depletion, amortization and retirements ...	684	631	628	609	610
Exploration and dry hole expenses .....	490	364	317	255	156
Department of Energy entitlements .....	232	214	224	14	—
Interest on long-term financing .....	110	109	114	121	135
Income applicable to minority interests .....	49	62	60	44	36
	<u>17,642</u>	<u>16,191</u>	<u>13,338</u>	<u>14,384</u>	<u>7,820</u>
INCOME BEFORE TAXES ON INCOME .....	<u>2,187</u>	<u>2,208</u>	<u>2,712</u>	<u>3,815</u>	<u>2,176</u>
<b>TAXES ON INCOME</b>					
United States .....	211	226	120	61	35
Foreign .....	1,224	1,166	1,892	2,689	1,341
	<u>1,435</u>	<u>1,392</u>	<u>2,012</u>	<u>2,750</u>	<u>1,376</u>
NET INCOME .....	<u>752</u>	<u>816</u>	<u>700</u>	<u>1,065</u>	<u>800</u>
RETAINED EARNINGS AT BEGINNING OF YEAR .....	5,800	5,320	4,951	4,193	3,689
CASH DIVIDENDS .....	(360)	(336)	(331)	(307)	(296)
RETAINED EARNINGS AT END OF YEAR .....	<u>\$ 6,192</u>	<u>\$ 5,800</u>	<u>\$ 5,320</u>	<u>\$ 4,951</u>	<u>\$ 4,193</u>
<b>PER-SHARE DATA</b>					
Net income .....	<u>\$ 3.86</u>	<u>\$ 4.19</u>	<u>\$ 3.60</u>	<u>\$ 5.47</u>	<u>\$ 4.06</u>
Cash dividends .....	<u>\$ 1.85</u>	<u>\$ 1.73</u>	<u>\$ 1.70</u>	<u>\$ 1.58</u>	<u>\$ 1.50</u>
Weighted average shares outstanding (in thousands) .....	<u>194,950</u>	<u>194,804</u>	<u>194,710</u>	<u>194,658</u>	<u>197,250</u>

\* Prior years reclassified. See Item 1 on page 52.

\*\* Reclassified. See Note 26 on page 43.

## Management's Discussion and Analysis of the Summary of Operations

Information with respect to the Company's results of operations for the fourth quarter and full year 1977 appears in the section entitled "Financial Review" on pages 22 and 23 of the accompanying 1977 Annual Report to Shareholders and, in accordance with the provisions of General Instruction F, is incorporated herein by reference.

The following information is furnished in further response to the requirements of this item:

### 1977 Versus 1976

#### Revenues

*Sales and other operating revenues, United States*—Increased by \$972 million, or 12 percent, primarily as a result of the following items:

—\$552 million increase in refined product revenues principally reflecting the higher price of distillates as a result of the government's price decontrol during 1976 and increased volumetric sales as a result of the strong demand for distillates during the severe winter weather in early 1977. Gasoline price increases also contributed to improved revenues reflecting the Company's ability to pass through higher production costs to its customers, offset to some extent by a two-percent decrease in gasoline volumes.

—\$153 million increases in chemical revenues reflecting higher prices for certain olefins; however, these price levels were not sufficient to cover all of the Company's increased pro-



duction costs, especially those resulting from higher energy and raw material costs. Higher volumetric sales of olefins and polyethylenes also contributed increased revenue. Demand for olefins rose in relationship to the expansion in the U.S. plastics industry as high- and low-density polyethylene volumes increased, reflecting an overall industry growth of about 13 percent.

—\$107 million increase in natural gas revenues occurred equally between regulated and non-regulated gas sales. Approximately 75 percent of the improvement was due to increased gas prices and the balance is attributable to increased volumes.

—\$105 million increase in natural gas liquids revenues mainly due to increased volume sales reflecting the growing market of the Company's Warren Petroleum division.

*Sales and other operating revenues, Canada*—Increased \$249 million, or 11 percent, primarily reflecting government-allowed increases in the price of crude oil, natural gas, and refined products, offset by lower crude oil and natural gas volumes, a government-imposed 60-day price freeze on finished products, and severe market competition which prevented the full pass through of increased production costs.

*Sales and other operating revenues, Europe*—Increased \$200 million, or 10 percent, primarily as a result of higher volumetric sales of Company-produced distillates, increased jet fuel volumes reflecting new contracts for airport operations, and generally increased activities in Belgium, Italy and Great Britain.

*Interest income*—Decreased by \$40 million, or 21 percent, as a result of a decrease in 1977 in the Company's investment in Eurodollar certificates of deposit and as a result of nonrecurring interest income received in 1976 in connection with the participation settlement with the government of Nigeria.

## **Deductions**

*Purchased crude oil and products*—Increased by \$921 million, or nine percent, reflecting increased prices of crude oil as a result of two OPEC price increases during 1977, offset to some extent by lower volumetric purchases as a result of a worldwide crude surplus. In the United States, crude purchase costs were also higher due to the Department of Energy's reclassification of domestic oil properties and the decontrol of stripper prices in late 1976.

*Exploration and dry hole expenses*—Increased by \$126 million, or 35 percent, reflecting the Company's commitment to substantially increase its exploration program. Of this amount, approximately 61 percent was expended in the United States as a result of increased wildcat well drilling, especially offshore Louisiana, California and Alaska, and higher geological and geophysical costs; of the remaining amount, \$40 million was expended in Canada primarily reflecting the Company's growing expenditures in the Beaufort Sea.

## **1976 Versus 1975**

### **Revenues**

*Sales and other operating revenues, United States*—Increased by \$726 million, or 10 percent, primarily as a result of the following items:

—\$474 million increase in refined product revenues principally reflecting increased prices for gasoline and distillates as a result of the Company's ability to pass through product cost increases to its customers; higher gasoline volume sales representing improved self-service and jobber activities; and increased distillate volume sales as a result of the decontrol of distillates in mid-1976 which stimulated new accounts in the jobber market.

—\$132 million increase in chemical revenues primarily as a result of both volumetric and price increases for certain chemicals. Volume increases in aromatics resulted from the lead phase-down program in gasoline which made certain chemicals attractive as octane improvers; volume increases in olefins reflected higher contract requirements from both old and new customers; and volume increases for low-density polyethylene reflected the generally higher U.S. demand for plastic products.

—\$ 58 million increase in natural gas liquids revenues principally due to the Company's successful efforts to obtain a larger share of the gas liquids market for its Warren Petroleum division.

—\$ 40 million increase in natural gas revenues, a direct result of higher priced new production from South Texas.



*Sales and other operating revenues, Canada*—Increased by \$397 million, or 21 percent, primarily due to higher Canadian crude oil, natural gas and gas liquids prices, which more than offset reduced Canadian production resulting from that government's restrictions on crude oil exporting.

*Sales and other operating revenues, Europe*—Increased by \$214 million, or 12 percent, primarily as a result of increased refined product revenues reflecting the Company's ability to recover the late 1975 OPEC crude price increases and higher chemical product revenues as a result of both increased prices and demand for certain of the Company's chemical products, principally olefins and aromatics.

*Sales and other operating revenues, Other Foreign*—Increased by \$942 million, or 19 percent, as a result of a significant expansion of the Company's outside crude acquisition and marketing network which, in 1976, included 36 types of crude compared with 16 types in 1975. In addition to the volumetric increase resulting from this expansion, the Company also benefited from a full year's effect of the pass through of the 1975 OPEC price increase.

*Equity in earnings (losses)*—Increased \$63 million, principally as a result of reduced operating losses of the Company's nuclear partnership, the inclusion in 1975 of a \$14-million loss provision in its real estate operations and improved earnings from foreign associated companies.

### **Deductions**

*Purchased crude oil and products*—Increased \$2,701 million, or 37 percent, principally as a result of increased purchase costs for Kuwait and Venezuelan crudes which in prior years had been reflected as the Company's equity production; the increased acquisition of crude oil from third parties in order to meet the Company's demand for higher quality crudes not readily available in its own system; and cost, as well as volumetric, increases in feedstock purchases due to the improvement in chemical sales.

*Operating expenses*—Increased \$149 million, or 12 percent, reflecting increases in the cost of utilities, wages and salaries, and general repair and maintenance expenses.

*Sales, use, ad valorem and other taxes*—Decreased \$213 million, or 33 percent, principally as a result of the elimination of additional import fees, and the absence of additional tax assessments imposed by the Kuwait government on the Company's equity production in 1975.

*Exploration and dry hole expenses*—Increased \$47 million, or 15 percent, reflecting increased wildcat well drilling activity, especially offshore Texas and California, and an increase in geophysical and geological activity.

*Taxes on income, United States*—Increased \$106 million, or 88 percent, as a result of the increase in U.S. source earnings as well as the changes in the U.S. tax laws, offset partially by increased investment tax credits.

*Taxes on income, Foreign*—Decreased \$726 million, or 38 percent, primarily due to the absence in 1976 of foreign income taxes relating to the Company's former equity production in Kuwait and Venezuela and the shutdown of operations in Angola during the first quarter of 1976. Beginning in 1976, the Company's total cost of oil purchased from Venezuela and Kuwait is reflected as purchase costs whereas in previous years, part of the Company's costs included income taxes paid on equity production.

### **Item 3. Properties**

In accordance with the provision of General Instruction F, information in response to the requirements of paragraph (a) of this item is contained in Notes 7 and 8 of Notes to Financial Statements which appear on page 34 of the accompanying 1977 Annual Report to Shareholders and are incorporated herein by reference.

#### ***Oil and Gas Reserves***

The following table sets forth estimates of the net proved reserves of crude oil, of natural gas liquids and of natural gas of the Company at December 31, 1977 and 1976. Net reserves are estimated after deduction of royalties and, therefore, represent only that production which is owned by the Company and its subsidiaries. In the United States, royalties are generally based on a fixed fractional interest. Therefore, royalties will fluctuate in direct proportion to fluctuations in reserve estimates. In Canada, government royalty rates can vary depending on prices, production volumes, the timing of initial production and changes in legislation. Due to the uncertainty of future royalty rates, the net Canadian reserves have been calculated on the basis of the royalty rate experienced in late 1977 and 1976. Estimates of proved developed reserves include only those reserves which can be expected to be recovered through existing wells with existing equipment and operating methods. Estimates of proved undeveloped future net recoverable reserves include only those reserves which are expected to be recovered on undrilled acreage from new wells which are virtually certain of production when drilled, or from presently existing wells which would require relatively major expenditures to effect recompletion. The



figures presented are believed to be reasonable estimates of reserves which may be expected to be recoverable commercially at current prices and costs under existing regulatory practices and with existing conventional equipment and operating methods. They do not include reserves that may be recoverable after the expiration of leases and concessions now held by the Company and do not include quantities which may be found by new discoveries in the future, by extensions of the areas now classified as proved in reservoirs presently known to be productive, or by improved producing techniques not yet pilot-tested or installed. While the Company anticipates that in certain fields additional wells will continue to be drilled in order to maintain or increase the rate of production or improve the recovery performance, these factors have also been excluded from the following estimates of proved reserves.

Under these circumstances, present estimates of oil and gas reserves at December 31, 1977 are, and comparable estimates of oil and gas reserves at December 31, 1976 were, as follows:

	Estimated Reserves					
	Net Crude Oil (Millions of Barrels)		Net Natural Gas Liquids (Millions of Barrels)		Net Natural Gas (Billions of Cubic Feet)	
	1977	1976	1977	1976	1977	1976
United States(1)						
Proved developed .....	992	976	173	185	6,023	6,070
Proved undeveloped .....	33	16	11	5	376	177
Total United States .....	<u>1,025</u>	<u>992</u>	<u>184</u>	<u>190</u>	<u>6,399</u>	<u>6,247</u>
Canada						
Proved developed .....	235	254	55	56	1,500	1,500
Proved undeveloped .....	4	3	2	3	600	500
Syncrude—proved undeveloped(2) .....	191	191	—	—	—	—
Europe—North Sea						
Proved undeveloped .....	134	126	—	—	100	100
Other Foreign(3)						
Proved developed .....	201	215	—	—	—	—
Proved undeveloped .....	187	175	—	—	—	—
Total Foreign .....	<u>952</u>	<u>964</u>	<u>57</u>	<u>59</u>	<u>2,200</u>	<u>2,100</u>

- (1) 1977 includes 46 million barrels of proved developed crude oil, 11 million barrels of proved undeveloped crude oil and 167 billion cubic feet of natural gas attributable to Kewanee.
- (2) Synthetic crude oil reserves resulting from Gulf Canada's interest in the Syncrude Canada Limited project in the Athabasca tar sands are shown in gross barrels as the level of royalties cannot be reasonably predicted. The Alberta government's share from the Syncrude project is 50 percent of the net profits, as defined in an agreement between the project participants and the government, with an option to convert to 7.5 percent gross royalty. On either basis, the Alberta government has the right to take its share in kind. These reserves will be extracted by mining and processing tar sands.
- (3) The Company has proved reserves of oil and gas in various countries in Africa. In recent years there have been significant changes in ownership of foreign reserves which have resulted from participation in and nationalization of producing properties by certain governments of foreign oil producing countries, and the reserves in such countries are subject to continuing changes in ownership. The reserves shown represent the Company's net equity after participation and exclude the Company's share of reserves in Angola as that country's government will not give permission for such disclosure.

Changes in reserves during 1977 and 1976 were as follows:

	Total Proved Developed and Undeveloped					
	Net Crude Oil (Millions of Barrels)		Net Natural Gas Liquids (Millions of Barrels)		Net Natural Gas (Billions of Cubic Feet)	
	United States	Foreign	United States	Foreign	United States	Foreign
Reserves—December 31, 1975 .....	1,033	1,247	205	63	6,579	2,180
Additions from drilling .....	50	131	13	—	454	50
Revisions of previous estimates .....	33	7	(9)	(4)	(159)	(10)
Production .....	(124)	(91)	(19)	—	(627)	(120)
Nationalization—Ecuador .....	—	(330)	—	—	—	—
Reserves—December 31, 1976 .....	992	964	190	59	6,247	2,100
Additions from drilling .....	71	17	21	—	710	200
Purchases—Kewanee .....	58	—	—	—	173	—
Revisions of previous estimates .....	27	38	(7)	2	(50)	10
Production .....	(123)	(67)	(20)	(4)	(681)	(110)
Reserves—December 31, 1977 .....	<u>1,025</u>	<u>952</u>	<u>184</u>	<u>57</u>	<u>6,399</u>	<u>2,200</u>

In addition to the above reserves, the Company has formal and informal purchase arrangements with several governments of foreign oil producing countries which give it the right to purchase approximately



666,000 barrels per day of crude oil. At the Company's option, the average daily volume can be increased or decreased by 10 percent and the arrangements contain quarterly price adjustment and phase-out provisions. The Company is a member of the Iranian Consortium and under an agreement between the Iranian government and the Consortium, the Company has the right to lift certain volumes of crude oil for export. At present, the Company's share of these crude oil liftings is approximately 260,000 barrels per day.

#### *Availability of Oil and Gas*

The availability of oil and gas from the 1977 estimated reserves and from contract supplies through December 31, 1978 is based on an estimate of that quantity of oil and gas which can be produced from current proved developed reserves using presently installed equipment under existing economic and operating conditions. These estimates have been based on past performance and represent an amount of oil and gas that can be produced from existing proved developed reserves under normal operations with current prices and costs. Under these circumstances, present estimates of the availability of oil and gas during 1978 are as follows:

	Net Crude Oil (Millions of Barrels)	Net Natural Gas Liquids (Millions of Barrels)	Net Natural Gas (Billions of Cubic Feet)
United States .....	118	21	611
Canada .....	24	5	113
Other Foreign .....	48	—	—

Additional information relating to certain gas sales contracts and legal proceedings instituted against the Company in connection with the gas sales contracts is contained in Note 18 of Notes to Financial Statements on page 40 of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference in further response to the requirements of this item.

#### *Estimates Included in Other Reports*

The Company is not required to file, and has not filed, any reserve estimates on a recurring basis with respect to its total owned proved reserves with any federal or foreign governmental regulatory authority or agency other than the SEC. Information concerning the Company's reserves has, however, been provided to various governmental regulatory authorities and agencies, including the Department of Energy, and the FTC on a special request basis. Such information has been compatible with the data furnished to the SEC, although not necessarily directly comparable due to special requirements of the individual requests, such as requirements to report in some instances on a gross, net or total operator basis and requirements to report in terms of smaller units.

#### *Other Information*

In accordance with General Instruction F, information with respect to net production of crude oil, natural gas and natural gas liquids, gross and net wells drilled and gross and net producing acreage is contained in the Five-Year Financial and Statistical Summary which appears on pages 46 through 50 of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference. Additional information regarding the Company's drilling activities at December 31, 1977 is as follows:

	Total		United States		Foreign	
	Gross	Net	Gross	Net	Gross	Net
Wells capable of producing						
Single completions .....	47,435	17,412	40,690	15,790	6,745	1,622
Multiple completions .....	1,216	827	965	702	251	125
	<u>48,651</u>	<u>18,239</u>	<u>41,655</u>	<u>16,492</u>	<u>6,996</u>	<u>1,747</u>
Wells in process of drilling .....	150	100	117	86	33	14
Waterfloods in process of installation .....	10	8	10	8	—	—
Pressure maintenance operations						
Water injection method .....	16,632	4,081	15,673	3,948	959	133
Other methods .....	1,735	750	1,423	622	312	128

*Gross wells represent the total number of wells in which all or part of the working interest is owned by the Company.*

*Net wells represent only that part of the working interest applicable to the Company, that is, the sum of all fractional parts.*

In addition to the gross and net acreage on page 47 of the Five-Year Financial and Statistical Summary, the Company had approximately 165 million gross acres and 92 million net acres of non-producing properties in Japan, Indonesia, Australia and other foreign locations. The Company is currently conducting preliminary exploration on some of this acreage and the cost of maintaining these total holdings is minimal.



As of December 31, 1977, the large number of leases for undeveloped acreage held in the U.S. significantly reduces the possibility of the expiration of any holding or group of holdings having a significant impact on the Company's domestic acreage position. The remaining terms of foreign leases and concessions, including Canada, vary from one month to ten years and before the expiration of certain leases and concessions the Company may take various stipulated actions to insure their renewal.

#### Item 4. Parents and Subsidiaries

As of February 7, 1978, no person owned of record, or, to the knowledge of the Company, beneficially, as much as 10 percent of the Capital Stock of the Company. Certain heirs and descendants of A. W. Mellon, R. B. Mellon and W. L. Mellon, certain charitable foundations established by members of those families and certain personal trusts in which such heirs and descendants are interested owned, as of that date, about 17 percent of the outstanding Capital Stock of the Company, and, if they were to act together, might be in a position to exercise a controlling influence in the management of the Company. As of February 7, 1978, the Directors of the Company as a group may, under interpretations of the Securities and Exchange Commission, be deemed to have owned beneficially 237,423 shares (less than two-tenths of one percent) of the outstanding Capital Stock of the Company, including 58,621 shares as to which such persons have disclaimed beneficial ownership. The information as to the interests or beneficial ownership of the persons indicated above rests within the knowledge of such persons, and the Company disclaims responsibility for the accuracy and completeness of such information, which was supplied to the Company by or on behalf of such persons.

The following list of the principal subsidiaries of the Company indicates their respective relationship to the registrant and the state or jurisdiction under which each subsidiary was organized:

<u>Name of Company</u>	<u>State or other jurisdiction in which subsidiary was organized</u>
Gulf Oil Corporation (Registrant)	
Bulk Petroleum Corporation	Delaware
Cabinda Gulf Oil Company	Delaware
Gulf Oil Germany, Inc.	Delaware
Gulf Refining Company	Delaware
Kewnew Inc.	Delaware
Kewanee Industries, Inc.	Delaware
The Pittsburg & Midway Coal Mining Company	Missouri
Transocean Gulf Oil Company	Delaware
Afran Transport Company	Liberia
Gulf Kuwait Company	Delaware
Gulf Oil Canada Limited	Canada
Gulf Oil Company (Nigeria) Limited	Nigeria
Gulf Oil (Great Britain) Limited	England
Gulf Oil Trading Company, Limited	Bahamas Islands
Kupan International Company	Liberia
Gulf Italiana S.P.A.	Italy
Mene Grande Oil Company	Delaware
Midcaribbean Investments Limited	Bahamas Islands
Caribbean Gulf Refining Corporation	Puerto Rico
Gulf Petroleum, S.A.	Panama

The accounts of the Registrant and all subsidiary companies listed above are included in the consolidated financial statements and schedules of the Company. All of the companies listed above are wholly owned by the Registrant, except for Gulf Oil Canada Limited, 68.2% of the Capital Stock of which is owned by the Registrant.

The names of approximately 125 consolidated subsidiaries and the names and financial statements of nonconsolidated subsidiaries (affiliates) and associates (companies owned 50% or less) are omitted, since when considered in the aggregate they would not constitute a "significant subsidiary" as defined in Rule 1.02 of Regulation S-X.



## Item 5. Legal Proceedings

In accordance with the provision of General Instruction F, certain information in response to the requirements of this item is contained in Notes 6, 16, 17, 18 and 27 of Notes to Financial Statements which appear on pages 32, 33, 38, 39, 40 and 43, respectively, of the accompanying 1977 Annual Report to Shareholders and is incorporated herein by reference.

Reference is made to paragraphs 3 through 7 of Item 5 of the Company's Form 10-K Report for the fiscal year ended December 31, 1976 for information concerning nine derivative actions filed by shareholders on behalf of the Company in 1975 and a proposed settlement of those actions with certain present and former Directors and Officers of the Company who are among the named defendants. As reported there, appeals have been taken from the decisions by the United States District Court for the Western District of Pennsylvania to approve the proposed settlement and to grant the motion of Price Waterhouse & Co. to dismiss the consolidated amended complaint in the actions as to it. Hearings on these appeals were held in December 1977 before the United States Court of Appeals for the Third Circuit, which has not as yet rendered its decisions.

The derivative action entitled Project on Corporate Responsibility, Inc., et al., v. Gulf Oil Corporation, et al., Civil Action No. 74-493, also previously reported, is still pending in the United States District Court for the District of Columbia. Plaintiffs in that action ask the court to declare that certain defendants engaged in a scheme to defraud the Company, its shareholders and the court in rehiring Claude C. Wild, Jr. subsequent to a 1974 compromise and settlement and that such defendants pay to the Company certain amounts related to Mr. Wild's rehiring, as well as punitive damages in excess of five hundred thousand dollars.

During 1977, the U. S. Environmental Protection Agency brought five suits against the Company, three of which allege violations of the unleaded gasoline regulations and two others which allege improper controls for spillage into the environment. The Company believes that none of these suits will have a material adverse effect on its net assets or future earnings.

## Item 6. Increases and Decreases in Outstanding Securities and Indebtedness

### (a) Title of Class—Capital Stock (without par value)

	Number of Shares
Shares outstanding at January 1, 1977 .....	194,864,140
Shares issued:	
Under terms of incentive compensation plan on January 6, and February 24, 1977..	25,196
Upon exercise of stock options from January 10, through July 28, 1977 .....	6,500
Upon settlement of stock appreciation rights from January 4, through November 8, 1977 .....	72,655
Shares outstanding at December 31, 1977 .....	<u>194,968,491</u>

### (b) Increases (Decreases) in Outstanding Indebtedness of the Registrant and its Consolidated Subsidiaries Previously Reported on Form 10-Q:

On February 8, 1977, the Company's Canadian subsidiary issued \$125 million of 8¾% Notes due 1997. Information with respect to this transaction is contained in the Company's Form 10-Q for the Three Months ended March 31, 1977.

On April 28, 1977, the Company prepaid its 7½% DM 100 million Bonds. Information with respect to this transaction is contained in the Company's Form 10-Q for the Six Months ended June 30, 1977.

### (c) Increases (Decreases) in Outstanding Indebtedness of the Registrant and its Consolidated Subsidiaries During the Fourth Quarter 1977:

On December 15, 1977, the Company guaranteed 25 percent of a loan from Metropolitan Life Insurance Company to Oklahoma Nitrogen Company, a partnership in which the Company holds a 25 percent interest. The aggregate amount of this loan was \$90 million, of which the Company's share under its guarantee is approximately \$23 million. The Note evidencing this indebtedness is due in 1992 and bears interest at the rate of 8.75 percent per annum. The proceeds were used by Oklahoma Nitrogen Company to repay a \$30 million construction loan from Metropolitan Life Insurance Company and to reimburse Woodward Chemicals, a subsidiary of W. R. Grace, for \$60 million advanced for plant construction. The Note was not registered under the Securities Act of 1933 in reliance upon the exemption contained in Section 4(2) of that Act.



On August 1, 1977, the Company and one of its subsidiaries borrowed \$8 million from Morgan Guaranty Trust Co. of New York, London, and Citicorp International Bank Ltd., London. The Notes evidencing this indebtedness mature on September 30, 1983 and bear annual interest ranging from ½ to 1¾ percent over the London Inter-Bank Offer Rate. The proceeds of such loans are being used to finance expenditures in the North Sea under the U.K. government's Interest Relief Grant Scheme.

A subsidiary of the Company entered into a loan arrangement with Algemene Bank Nederland. The loan provides for an aggregate of \$9 million (20 million Dutch Guilders) and the Note evidencing this indebtedness matures in 1984 and bears interest at the rate of 8¾ percent per annum. The proceeds from this transaction will be used by the subsidiary for general working capital purposes.

The Notes referred to in the immediately preceding two paragraphs were not registered under the Securities Act of 1933 in reliance upon the exemption contained in Section 4(2) of that Act. Such registration was also not required because the Notes were offered outside the U.S. and under circumstances in which they will not be reoffered in the U.S.

## Item 9. Approximate Number of Equity Security Holders

As at February 7, 1978

<u>Title of Class</u>	<u>Number of Record Holders</u>
Capital Stock (without par value) .....	357,327

## Item 11. Executive Officers of the Registrant

The age, present Corporate office and business experience, including all positions held concurrently or successively in each of the past five years by each of the Company's Executive Officers and by certain division and subsidiary company Executive Officers are reported below. The Company's By-Laws provide that the Company's Officers may be removed from office at any time by the Board of Directors.

Jerry McAfee—Age 61; Chairman of the Board and Chief Executive Officer since January 1976.  
1973—President and Chief Executive Officer, Gulf Oil Canada Limited.

James E. Lee—Age 56; President and Director since 1973.

Z. D. Bonner—Age 59; Chairman, Gulf Oil Chemicals Company since 1975; Director since 1974.  
1973—President, Gulf Oil Company-U.S.; 1973—Executive Vice President, Gulf Oil Corporation.

Edward B. Walker, III—Age 56; Executive Vice President since January 1978; Director since 1974.  
1973—Executive Vice President, Gulf Oil Corporation; 1975—President, Gulf Energy & Minerals Company.

Harold H. Hammer—Age 57; Executive Vice President since 1973.

Robert W. Baldwin—Age 56; Chief Executive Officer, Gulf Refining & Marketing Company since 1975.  
1973—Executive Vice President, Gulf Oil Company-Latin America; 1973—President, Gulf Energy & Minerals Company.

Charles A. Boyce—Age 48; Secretary and Associate General Counsel since March 1976.  
1973—Tax Counsel; 1975—Assistant General Counsel and Tax Counsel.

Gerald W. Bush—Age 40; Senior Vice President since 1975.  
1973—Director, Mayor's Office of Commerce and Manpower, City of Boston (Mr. Bush was responsible for industrial development and all federally funded manpower programs in the City of Boston);  
1975—Executive Director, Gulf Management Institute.

Richard J. Goeken—Age 51; President, Gulf Mineral Resources Company since 1976.  
1973—General Manager, Supply and Transportation, Gulf Oil Trading Company; 1973—Vice President, Gulf Oil Company-U.S.

Herbert I. Goodman—Age 54; President, Gulf Trading & Transportation Company since 1975.  
1973—President, Gulf Oil Trading Company.



Melvin J. Hill—Age 58; President and Chief Executive Officer, Gulf Oil Exploration and Production Company since January 1978.

1973—President, Gulf Global Exploration Company; 1974—Senior Vice President, Gulf Oil Corporation; 1975—President, Gulf Energy and Minerals Company-International.

Pierre E. Holloway—Age 50; Senior Vice President since 1974.

1973—Vice President-Corporate Planning and Economics.

Z. Q. Johnson—Age 54; President, Gulf Science & Technology Company since 1975.

1973—Executive Vice President, Gulf Oil Corporation.

Juergen Ladendorf—Age 44; Senior Vice President since 1975.

1973—Chairman of the Board and Chief Executive Officer-Management Decision Analysis, Inc. (Mr. Ladendorf was responsible for strategy formulation and overall direction of the business activities of the corporation.)

Merle E. Minks—Age 60; General Counsel since 1969.

William P. Moyles—Age 47; President and Chief Executive Officer, Gulf Oil Real Estate Development Company since January 1977. 1973—Vice President, Corporate Development, Gulf Oil Corporation; 1976—President, Gulf Oil Real Estate Development Company.

James L. Murdy—Age 39; Vice President and Comptroller since 1974.

1973—Vice President-Finance, Equity Funding Corporation of America. (Mr. Murdy joined Equity Funding as chief financial officer to assist the court-appointed trustee in Equity Funding's reorganization proceedings.)

Jayne Baker Spain—Age 54; Senior Vice President since January 1976.

1973—Vice Chairman, U.S. Civil Service Commission. (Mrs. Spain assumed this position by Presidential appointment and Senate confirmation, and was responsible for personnel policy and implementation.)

Paul H. Weyrauch—Age 52; Treasurer since 1973.

## **Item 12. Indemnification of Directors and Officers**

In accordance with the provisions of General Instruction H, information is not included for this item as it is not materially changed from Item 9 of the Company's Form 10-K Report for the fiscal year ended December 31, 1976.

## **Item 13. Financial Statements, Exhibits Filed and Reports on Form 8-K**

(a)(1) The 1977 and 1976 financial statements appearing on pages 25 through 43 of the accompanying 1977 Annual Report to Shareholders together with the report thereon of Price Waterhouse & Co. dated February 28, 1978 appearing on page 43 and, as indicated under Items 1 through 3, the five-year financial and statistical summaries appearing on pages 45 through 50 and the annual and quarterly earnings discussion on pages 22 and 23 of the accompanying 1977 Annual Report to Shareholders are incorporated in this Form 10-K Annual Report by reference. The information appearing on pages 2 through 21, 23 (except for the quarterly earnings discussion) and 24 and on pages 44, 68 and 69 of the accompanying 1977 Annual Report to Shareholders is not deemed to be filed as part of this Form 10-K Annual Report. The report of Price Waterhouse & Co. is based in part on the report of Clarkson, Gordon & Co. dated February 7, 1978 appearing on page 67.

The financial statements and schedules of the Registrant have been omitted as the Registrant is primarily an operating company and together with totally held subsidiaries meets the requirements as to revenues and assets.

All other schedules have been omitted as they are either not applicable, not required, not significant or the required information is given in the financial statements or notes.



(2) Exhibits\*

1. The Pension Plan of Gulf Oil Corporation reflecting all amendments adopted in 1977.
  2. Agreement dated May 27, 1977 among the Government of Ecuador, Corporacion Estatal Petrolera Ecuatoriana and Ecuadorian Gulf Oil Company relating to the withdrawal of Ecuadorian Gulf Oil Company from Ecuador.
  3. The following Directors and Officers Liability and Company Reimbursement Liability Policies as amended to December 31, 1977 by endorsements thereto other than those which change the individual named Insureds':
    - (a) National Union Fire Insurance Company of Pittsburgh, Pa. Policy No. 384-89-76;
    - (b) Lloyd's Policy No. 501/B7715412(a);
    - (c) Companies Collective Policy No. 501/B7715412(b); and
    - (d) National Union Fire Insurance Company of Pittsburgh, Pa. Policy No. 384-90-59.
  4. Statement of information which may be required to be disclosed in accordance with the March 11, 1975 Consent Decree to which the Company is a party.
- (b) On December 27, 1977, the Company filed with the Commission a Form 8-K dated December 13, 1977 in response to Item 4—Changes in Registrant's Certifying Accountants.

\*Note to Shareholders: A copy of these Exhibits, as well as copies of the summary plan description and summary financial statements relating to Exhibit 1, is available at a fee of \$3.00 per document to any shareholder upon written request to the Secretary, Gulf Oil Corporation, P. O. Box 1166, Pittsburgh, Pennsylvania, 15230.

## PART II

In accordance with the provisions of General Instruction H, information for Items 14 through 18 is omitted because prior to April 30, 1978 the Company expects to have filed with the Commission, pursuant to Regulation 14A, a definitive Proxy Statement involving the Election of Directors at its 1978 Annual Meeting.

## SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report to be signed on its behalf by the undersigned thereunto duly authorized.

GULF OIL CORPORATION  
(Registrant)

By J. L. Murdy  
Vice President and  
Comptroller

February 28, 1978

## Supplemental Schedules

### Supplementary Replacement Cost Data (Unaudited)

The Securities and Exchange Commission (SEC) requires the disclosure of replacement cost information of productive capacity and inventories. Replacement costs as defined by the SEC are not intended to reflect the current market or disposal values of existing productive capacity or inventories. In addition, it is management's opinion that the replacement cost data presented cannot be used to impute the total effect of inflation on the financial statements because no consideration is given to such factors as the effects of holding gains or losses on monetary items or the operating efficiencies which would result from replacing existing productive capacity. Furthermore, due to subjective judgments inherent in the estimates, the information should not be viewed as precise and may not be comparable with other companies in the petroleum industry.

The Company's calculation of replacement cost for productive capacity and inventories at December 31, 1977 and 1976 is summarized as follows:

Millions of Dollars (Unaudited)								
	Historical Cost		Exclusions		Subject to Replacement Cost		Estimated Replacement Cost	
	1977	1976	1977	1976	1977	1976	1977	1976
<b>Properties</b>								
Mineral resource assets								
Oil and gas .....	\$ 7,318	\$ 5,658	\$7,318	\$5,658	\$ —	\$ —	\$ —	\$ —
Mining .....	499	421	329	421	170	—	260	—
Total .....	7,817	6,079	7,647	6,079	170	—	260	—
Other assets .....	6,862	6,396	1,054*	1,221*	5,808	5,175	13,430	12,000
	14,679	12,475	8,701	7,300	5,978	5,175	13,690	12,000
Accumulated depreciation .....	6,347	5,843	3,528	3,344	2,819	2,499	6,685	6,140
Net investment .....	\$ 8,332	\$ 6,632	\$5,173	\$3,956	\$3,159	\$2,676	\$ 7,005	\$ 5,860
Depreciation expense .....	\$ 684	\$ 631	\$ 396	\$ 389	\$ 288	\$ 242	\$ 620	\$ 550
<b>Inventories</b>								
LIFO .....					\$ 582	\$ 604	\$ 1,770	\$ 1,740
FIFO .....					524	354	560	375
Average Cost .....					263	284	280	300
					\$1,369	\$1,242	\$ 2,610	\$ 2,415

\*Represents primarily land, intangibles and unfinished plant which are not part of productive capacity.

A description of the methods used in developing replacement cost data for productive capacity and inventories is as follows:

#### PRODUCTIVE CAPACITY

Assets directly associated with oil and gas reserves have been exempted from the requirements for the calculation of replacement cost. Mineral reserves resulting from mining operations are temporarily excluded pending further study by the SEC. Exchange rates at December 31, 1977 were used for translation of foreign properties into U.S. dollars.

#### United States

The replacement cost for U.S. assets was estimated as follows: mining facilities were developed by applying industry indexes to historical costs; refining facilities were derived from engineering estimates to replace the total U.S. refining capacity; marketing facilities were based on engineering estimates of the replacement cost of the typical service station; chemical facilities were based on engineers' estimates to replace existing capacities for the various product lines; all other assets were based on engineering estimates, current costs of comparable equipment or the application of published indexes.

#### Canada

The replacement cost for Canadian assets was derived as follows: mining facilities were based on applying published indexes; refining facilities were based on engineering estimates using equipment cost curves and in some instances a general petroleum industry index; chemical facilities were estimated using a combination of cost curves and the application of a petroleum industry index to historic costs or recent cost appraisals; marketing facilities and other productive capacity were assessed either through use of current costs developed for representative facilities, direct pricing or application of indexes meeting the criteria of the asset group being estimated.



## Europe

The replacement cost for European assets was estimated as follows: refinery and chemical plants were based on engineering estimates utilizing localized construction cost indexes; all other assets were based on application of gross domestic product indexes.

## Other Foreign

The replacement cost for those foreign assets located outside Canada and the European continent was based on the application of published foreign indexes or on engineering estimates to replace present productive capacity except for the tanker fleet which was based on engineering estimates of the cost to construct the total dead-weight tonnage in a configuration of optimum fleet design.

## Depreciation

Replacement cost accumulated depreciation and depreciation expense was calculated for individual classes or groups of assets using the composite straight-line economic life of the historical cost investments.

## INVENTORIES

The replacement cost of LIFO inventories was based on recent purchase prices. Inventories recorded under the FIFO method and the average cost method generally represent items acquired during the current year and, therefore, their replacement cost approximates their book value. The replacement cost of foreign inventories was translated into U.S. dollars at exchange rates in effect at year-end.

The amount of cost of sales calculated on a current replacement cost basis is not significantly different from the Company's historical cost of sales.

## Properties (SEC Schedule V)

Millions of Dollars—Years Ended December 31, 1977 and 1976

Classification 1977	Balance at beginning of period	Additions		Deductions		Balance at close of period
		At cost	Subsidiary acquired (Kewanee)	Retirements or sales	Transfers and reclassi- fications	
Petroleum						
Exploration & development . . . . .	\$ 5,766	\$1,271	\$277	\$ 56	\$ —	\$ 7,258
Natural gas liquids . . . . .	426	63	—	2	1	486
Refining & marketing . . . . .	4,008	313	—	120	2	4,199
International marine . . . . .	647	77	—	21	(1)	704
	<u>10,847</u>	<u>1,724</u>	<u>277</u>	<u>199</u>	<u>2</u>	<u>12,647</u>
Chemicals . . . . .	1,054	174	106	20	1	1,313
Minerals . . . . .	421	88	—	4	6	499
Corporate . . . . .	153	68	4	6	(1)	220
	<u>\$12,475</u>	<u>\$2,054</u>	<u>\$387</u>	<u>\$229</u>	<u>\$ 8</u>	<u>\$14,679</u>
1976						
Petroleum						
Exploration & development . . . . .	\$ 5,499	\$ 761	\$ —	\$441	\$53	\$ 5,766
Natural gas liquids . . . . .	389	38	—	8	(7)	426
Refining & marketing . . . . .	4,017	227	—	216	20	4,008
International marine . . . . .	593	90	—	39	(3)	647
	<u>10,498</u>	<u>1,116</u>	<u>—</u>	<u>704</u>	<u>63</u>	<u>10,847</u>
Chemicals . . . . .	915	150	—	4	7	1,054
Minerals . . . . .	364	70	—	2	11	421
Corporate . . . . .	109	26	—	2	(20)	153
	<u>\$11,886</u>	<u>\$1,362</u>	<u>\$ —</u>	<u>\$712</u>	<u>\$61</u>	<u>\$12,475</u>

## Accumulated Depreciation, Depletion and Amortization of Properties (SEC Schedule VI)

Millions of Dollars—Years Ended December 31, 1977 and 1976

Classification 1977	Balance at beginning of period	Additions charged to income	Deductions		Balance at close of period
			Retirements	Transfers and reclassi- fications	
Petroleum					
Exploration & development .....	\$2,973	\$383	\$ 54	\$3	\$3,299
Natural gas liquids .....	224	20	2	—	242
Refining & marketing .....	1,907	169	77	—	1,999
International marine .....	184	30	12	—	202
	5,288	602	145	3	5,742
Chemicals .....	346	57	19	—	384
Minerals .....	143	12	3	4	148
Corporate .....	66	13	5	1	73
	<u>\$5,843</u>	<u>\$684</u>	<u>\$172</u>	<u>\$8</u>	<u>\$6,347</u>
1976					
Petroleum					
Exploration & development .....	\$2,927	\$318	\$271	\$1	\$2,973
Natural gas liquids .....	209	21	6	—	224
Refining & marketing .....	1,857	181	126	5	1,907
International marine .....	178	30	24	—	184
	5,171	550	427	6	5,288
Chemicals .....	310	39	3	—	346
Minerals .....	110	34	1	—	143
Corporate .....	59	8	1	—	66
	<u>\$5,650</u>	<u>\$631</u>	<u>\$432</u>	<u>\$6</u>	<u>\$5,843</u>

## Supplementary Income Statement Information (SEC Schedule XVI)

Millions of Dollars—Years Ended December 31, 1977 and 1976

	Charged to expenses	
	1977	1976
Maintenance and repairs .....	\$ 452	\$ 384
Rents .....	\$ 219	\$ 231

## REPORT OF CLARKSON, GORDON & CO.

To the Directors of  
Gulf Oil Canada Limited:

We have examined the consolidated statements of financial position of Gulf Oil Canada Limited and subsidiary companies as at December 31, 1977 and 1976, and the consolidated statements of income, shareholders' equity, and changes in financial position for the years then ended. These financial statements, prepared for inclusion in the consolidated accounts of Gulf Oil Corporation, are expressed in United States dollars following the basis of translation from Canadian dollars set out in the notes thereto. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion these consolidated financial statements (not shown separately herein) present fairly the financial position of Gulf Oil Canada Limited and subsidiary companies as at December 31, 1977 and 1976, and the results of their operations and the changes in financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied.

Toronto, Canada  
February 7, 1978

CLARKSON, GORDON & CO.  
Chartered Accountants



## BOARD OF DIRECTORS

**Jerry McAfee (1) (4)**  
*Chairman of the Board and  
Chief Executive Officer  
Gulf Oil Corporation*

**James E. Lee (1) (4)**  
*President  
Gulf Oil Corporation*

**Charles M. Beeghly (3) (5)**  
*Retired Chairman of the Board  
and Chief Executive Officer  
Jones & Laughlin Steel Corporation*

**Z. D. Bonner**  
*Chairman  
Gulf Oil Chemicals Company*

**R. Hal Dean (5)**  
*Chairman of the Board and  
Chief Executive Officer  
Ralston Purina Company*

**Robert Dickey, III (3)**  
*Chairman and President  
Dravo Corporation*

**James H. Higgins (1) (3)**  
*Chairman of the Board and  
Chief Executive Officer  
Mellon Bank, N.A. and  
Mellon National Corporation*

**George Kozmetsky (2) (3)**  
*Dean, Graduate School of  
Business and College of  
Business Administration  
The University of Texas at Austin*

**Nathan W. Pearson (1) (5)**  
*Financial Advisor  
Paul Mellon Family Interests*

**Sister Jane Scully (2) (5)**  
*President  
Carlow College*

**Edwin Singer (1)**  
*Partner  
Whitcom Investment Company*

**Edward B. Walker, III**  
*Executive Vice President  
Gulf Oil Corporation*

**James M. Walton (2) (3)**  
*President  
Carnegie Institute and  
Carnegie Library of Pittsburgh*

- (1) Member of Executive Committee; Mr. McAfee, Chairman  
(2) Member of Business Principles Committee; Mr. Walton, Chairman  
(3) Member of Audit Committee; Mr. Higgins, Chairman  
(4) Member of Directors' Fee Committee; Mr. McAfee, Chairman  
(5) Member of Human Resources Committee; Mr. Beeghly, Chairman

## PRINCIPAL CORPORATE OFFICERS

**Jerry McAfee**  
*Chairman of the Board and  
Chief Executive Officer*

**James E. Lee**  
*President*

**Harold H. Hammer**  
*Executive Vice President*

**Edward B. Walker, III**  
*Executive Vice President*

**Gerald W. Bush**  
*Senior Vice President*

**Pierre E. Holloway**  
*Senior Vice President*

**Juergen Ladendorf**  
*Senior Vice President*

**Jayne Baker Spain**  
*Senior Vice President*

**Merle E. Minks**  
*General Counsel*

**Charles A. Boyce**  
*Secretary and Associate  
General Counsel*

**James L. Murdy**  
*Vice President  
and Comptroller*

**Paul H. Weyrauch**  
*Treasurer*

## OTHER CORPORATE OFFICERS AND OFFICIALS

**Ben C. Ball**  
*Vice President  
Planning Research*

**G. M. Binegar**  
*Vice President  
Human Resources*

**L. H. Bonin, Jr.**  
*Vice President  
Executive Director  
Washington Office*

**M. P. Breaux**  
*Vice President  
Industrial Relations*

**R. T. Brown**  
*Vice President  
Planning Operations*

**Nickolas J. Covatta, Jr.**  
*Vice President  
Strategy Development*

**F. D. Gassaway, M.D.**  
*Vice President, Medical*

**O. J. McGill**  
*Vice President  
General Auditor*

**W. E. Moffett**  
*Vice President  
Public Affairs*

**Jack H. Morris**  
*Vice President  
Financial Relations*

**G. K. Thompson**  
*Vice President  
Executive Representative,  
New York*

**A. Lewis, Jr.**  
*President  
Gulf Oil Foundation*



Corporate Senior Executive: Edward B. Walker, III, Jerry McAfee, James E. Lee and Harold H. Hammer



## CORPORATE OFFICES

Gulf Oil Corporation  
P. O. Box 1166  
Pittsburgh, Pennsylvania 15230  
Telephone: (412) 263-5000

## TRANSFER AGENTS

Bankers Trust Company, New York  
The First National Bank of Chicago  
Mellon Bank, N.A., Pittsburgh  
Canada Permanent Trust Company, Toronto

## REGISTRARS

Bankers Trust Company, New York  
The First National Bank of Chicago  
Pittsburgh National Bank  
Montreal Trust Company, Toronto

## PRINCIPAL DIVISIONS AND SUBSIDIARY COMPANIES

### GULF OIL EXPLORATION AND PRODUCTION COMPANY

M. J. Hill  
*President and Chief  
Executive Officer*

L. A. Ramsey  
*Executive Vice  
President and Chief  
Operating Officer*

J. O. Carter  
*Senior Vice President  
U.S. Operations*

J. A. Strand  
*Senior Vice President  
International  
Operations*

T. D. Lumpkin  
*President  
Gulf Oil Company-  
Latin America*

C. C. McKee  
*President  
Warren Petroleum  
Company*

### GULF MINERAL RESOURCES CO.

R. J. Goeken  
*President*

S. A. Zagnoli  
*Executive Vice  
President*

J. A. Borders  
*President  
The Pittsburgh &  
Midway Coal  
Mining Co.*

### GULF REFINING AND MARKETING COMPANY

R. W. Baldwin  
*President and Chief  
Executive Officer*

B. W. Miller  
*Senior Vice President*

E. F. Eisemann, Jr.  
*Executive Vice  
President  
Gulf Oil Company-  
U.S.*

T. G. Harper  
*Executive Vice  
President  
Gulf Oil Company-  
U.S.*

A. G. Smith  
*Executive Vice  
President  
Gulf Oil Company-  
U.S.*

D. R. Hoyer  
*President  
Gulf Oil Company-  
International*

### GULF OIL CHEMICALS COMPANY

Z. D. Bonner  
*Chairman and Chief  
Executive Officer*

W. C. Roher  
*President*

### GULF TRADING AND TRANSPORTA- TION COMPANY

Herbert I. Goodman  
*President and Chief  
Executive Officer*

S. L. Sugarman  
*Executive Vice  
President*

### GULF SCIENCE & TECHNOLOGY COMPANY

Z. Q. Johnson  
*President and Chief  
Executive Officer*

H. A. LaRue  
*Executive Vice  
President*

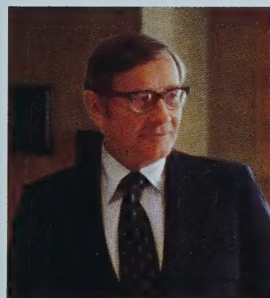
### GULF OIL REAL ESTATE DEVELOPMENT COMPANY

William P. Moyles  
*President and Chief  
Executive Officer*

### GULF OIL CANADA LIMITED

C. D. Shepard  
*Chairman and Chief  
Executive Officer*

J. L. Stoik  
*President*



Melvin J. Hill



Z. David Bonner



Robert W. Baldwin



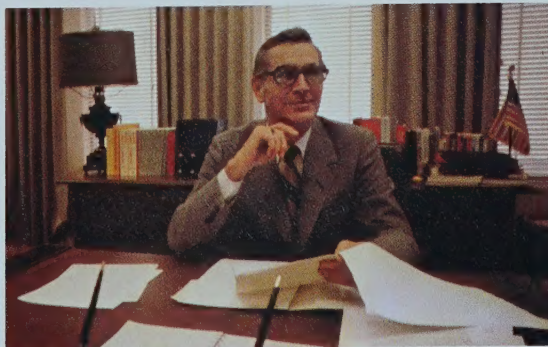
Richard J. Goeken



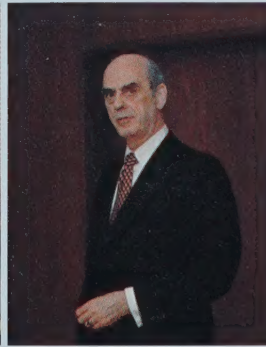
William P. Moyles



Herbert I. Goodman



Zane Q. Johnson



Clarence D. Shepard





GULF OIL CORPORATION  
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